An Address
ON
THE ADVANTAGES OF OXIDATION.

Delivered before the West London Medico-Chirurgical Society on Oct. 4th, 1895,

BY A. SYMONS ECCLES, M.B. ABERD.,
PRESIDENT OF THE SOCIETY.

[AFTER a few words of thanks to the Society for selecting him as their President, Dr. Eccles said:]

Gentlemen,—There are certain phenomena of life so familiar by reason of their constant occurrence within, around, and about us that I would venture to suggest the possibility of forgetting them if they were not so frequently brought before us in all their significance by some disturbance in regularity which we recognise as pathological; and at the risk of being tedious I would ask you to permit me to discuss very superficially, and of necessity inadequately, so well-established and unassailable a physiological doctrine as is embodied in the title of this address, "The Advantages of Oxidation." My excuse for referring to a subject, which you may regard as too obviously belonging to the very A B C of physiological truth to require any suggestion on my part, is that for the last two or three years I have been endeavouring in a very small way to learn for myself some lessons bearing on the oxidation processes in the human body. If, then, you are needlessly reminded of elementary physiological facts at the outset of this address you will perhaps forgive me for alluding to them in order to clear the way for those suggestions which I shall offer as the result of personal investigations—lessons in a measure self-taught, and maybe replete with error, inasmuch as they are only the crude and clumsy attempts of one who has not at his disposal the knowledge and skill of a scientific physiological chemist.

The first fact—or, so to speak, letter—of the physiological alphabet which it appears to me we should bear in mind while discussing the advantages of oxidation in regard to the human body, in health and disease, is this, that whereas plants by a reduction process build up simple bodies of small molecular value and stable composition into complex combinations of high molecular value and unstable constitution, animals, on the other hand (the human body, for instance), by oxidation break up the complex combinations of atoms formed by plants into bodies of much simpler constitution and of greater stability, and in this combustion process heat, work, and other forms of energy are evolved. The second letter of our physiological A B C to which I would draw your attention is that the end products of these oxidation processes are carbon dioxide and water, the result of non-azotised substances, and urea, which may again be decomposed into carbon dioxide and ammonia, the result of azotised matters or proteids. May I venture to suggest that most of the work done in the human body is performed, so far as we are yet aware, by the combustion of the carbohydrates, while the wear and tear of the organism itself are represented by the nitrogenous waste matters, the end product of complete combustion being urea? It may be that this suggestion will not hold good, but that, to continue my simile, I am attempting to construct from our physiological alphabet a word which is mis-spelt and does not exist as a physiological truth; but on reference to Professor Michael Foster's work I find that my notion, at any rate in regard to muscular work, is not so far-fetched as it might appear to be, for he compares the special contractile carbon-hydrogen substance of a muscular contraction to the charge of a gun, the products of its combustion being carbonic and sarcolactic acids, while the real living material of the fibre may be compared to the gun itself, which, however, is constantly undergoing change in excess, according to Foster, of mere wear and tear.

Since a large proportion of the oxidation processes carried on in the human body occurs in the muscular system, it may not be unprofitable to note briefly the present state of our knowledge in regard to the series of chemical events taking place in an active muscle. We find that the products of incomplete oxidation of both nitrogenous and non-nitrogenous matters are always in excess, while, except in cases of severe and almost unique over-fatigue, the formation of urea—i.e., of completely oxidised proteid matter—is not increased. It is to the accumulation of partially oxidised waste products within the muscle that we must attribute the fatigue, and that impotence to continue work after a certain time which supervenes on muscular exercise. It appears that the quantity of nitrogenous material oxidised is the same in an active and passive muscle, but during contraction such a quantity of oxygen is used up in the combustion of the hydrocarbons that insufficient oxygen remains for the complete oxidation of the nitrogenous matter; so, instead of urea, we have other substances resulting from muscle waste—default of oxygen leading to incomplete combustion and the consequent formation of uric acid and creatinine, substances which may be regarded as the insufficiently oxidised precursors of urea. But this incomplete oxidation is also shared by the hydrocarbons, for, although we find seven times the amount of carbon dioxide formed in an active muscle over and above the amount produced in the passive organ, there are certain products of incomplete combustion derived from hydrocarbons rendering the reaction of the fatigued muscle acid instead of alkaline. The most constant of these non-nitrogenous fatigue products is sarcolactic acid, and it is probably to the accumulation in the system of both this and the incompletely oxidised nitrogenous products of muscular activity that we may attribute the aching weariness of over-fatigue experienced by persons unaccustomed to exercise. It must be remembered, however, that, although evidences of excessive acidity and of leucomaines may be found after over-exercise in the urine of persons habitually sedentary, no such phenomena present themselves in the urine of individuals who are in training. In other words, it is possible to improve the processes of intra-organic oxidation and to render them more complete by means of a course of regular and systematised exercise, which will induce increased amplitude of respirations, augment the volume of blood passing through the muscular system, and favour the combustion of fatty tissue.

But oxidation does not only take place in the muscles, for we know that it occurs in the blood itself, in the glandular structures, and, as Ehrlich has shown, in the cells of all the tissues, especially in those of the brain, liver, and heart, where processes of oxidation and reduction are constantly going on.[1] I cannot hope to add much to the knowledge already placed at our disposal by Gautier,[2] who first gave the name leucomaine to alkaloids appearing during life in the tissues of animals. His researches, with those of Brieger, Bouchard, Liebreich, and Pouchet on the Continent, and of Thudichum in our own country, have resulted in the isolation of these toxic substances in healthy and morbid urine. It has been shown that they are physiologically produced in our bodies and eliminated by the bowels, kidneys, skin, and lungs. They exist in the blood where they accumulate if for any reason they are not got rid of, and under these circumstances we suffer from the effects of auto-intoxication; but there are two distinct methods by which nature provides that we should not poison ourselves with our own venom—viz., the elimination of these toxines by the organs of excretion and their destruction by oxygen. Of these two methods the most important is the process of oxidation, for most of these leucomaines are very readily oxidised, and, as Gautier has shown, it is by the constant renewal of oxygen that they are burned up and made to disappear, such of them as are not destroyed by combustion being more readily and easily eliminated after oxidation. Under normal conditions only a very small proportion of leucomaines is found in the urine; but if anything should interfere with the due oxygenation of the blood, or if the oxygen therein contained should be used up for the oxidation of other materials, then we find that there is a remarkable increase of leucomaines in the urine, pointing to an excess of these toxines in the blood, so that it would not be far wrong to describe the morbid condition of some patients as "leucomainæmia." In 1882 Bouchard demonstrated the presence of animal alkaloids in healthy urine and that they were greatly in excess in cases of infectious fevers, particularly in typhoid fever; while Pouchet observed them in the urine in certain cerebral maladies without fever. It is, however, in the class of disease so admirably described by Bouchard as "maladies per ralentissement de nutrition"—e.g., anæmia, chlorosis, gout,

[1] Brunton: Croonian Lectures, 1889, p. 96.
[2] Ptomaines and Leucomaines. Paris, 1886.

glycosuria, neurasthenia, and uricacidæmia—that we find the clearest evidence of insufficient activity in the oxidation processes, with excess in the urine of the products of incomplete oxidation. Speaking for myself, I would venture to assert that many phenomena of functional nervous disorders are primarily due to this deficiency of oxidation; that, as a consequence of this insufficient combustion, toxic substances accumulate in the blood and give rise to the train of symptoms—dyspeptic, myelasthenic, encephalasthenic, and emotional—which we classify or generalise under the term neurasthenia.[3] Whether these toxic matters are alkaloids or not, they appear to be capable of producing more or less profound disturbance in the functions of nutrition; and it may be that these extractives, nitrogenous and incompletely oxidised, exist side by side, as Gautier has suggested, with alkaloids which have been isolated and crystallised. The method employed for the detection of leucomaines in the urine is that which is described by Professor Alexander von Poehl of St. Petersburg in his communication on Oct. 10th, 1892, to the Academy of Sciences of Paris on the Rôle of Spermine in Intra-organic Oxidations, and is set down by him as follows. "To 100 c.c. of urine are added 25 c.c. of hydrochloric acid, HCl (sp. gr. = 1124), and 10 c.c. of a decinormal solution of phosphotungstic acid. The precipitate is composed of leucomaines as phosphotungstates." Von Poehl goes on to say that he estimated the nitrogen of this precipitate by the method of Kjeldahl, and in cases in which albumin or peptone was present these substances were eliminated by precipitating them with phosphotungstic acid in the presence of acetic acid. In examining urine for the presence of leucomaines I have closely followed the directions given by Von Poehl as above, save in regard to the Kjeldahl process for the estimation of nitrogen, which is of too complicated a character for ordinary clinical use. In every case the whole of the urine passed during twenty-four hours available for testing purposes has been collected, and from the mixed urine so obtained the necessary quantity for examination has been taken. (See Tables I. and II.) In some cases several observations have been made on the urine passed in the same twenty-four hours, and the morning and evening urines in a few cases have been separately tested.

Each specimen has been tested for albumin by the heat and nitric acid test, and in some cases after filtration by the acetic acid and ferrocyanide of potassium test. Similarly in every case the biuret test for peptones has been employed. Albumin has not been detected in the urine in any of the cases here recorded; in those in which the presence of peptone was indicated by the biuret test the urine has been filtered after the peptone was precipitated by the phosphotungstic acid in the presence of acetic acid, and the filtrate so obtained has been treated with hydrochloric and phosphotungstic acids in the proportions indicated by Von Poehl. In estimating the quantity of the precipitate of phosphotungstates each filter paper has been separately weighed before use, and from the total weight of the dried precipitate and filter paper after filtration the weight of the filter paper has been subtracted. The filter papers employed were those usually regarded as chemically pure, and the weights were taken by means of Becker's balance sensible to $\frac{1}{2}$ milligramme. Every precaution was taken to avoid error in carrying out the tests as far as they go, but I am aware that they are open to objection on the score of accuracy in the description of the precipitate. It is maintained by scientific chemists whom I have consulted in the matter that substances other than leucomaines and ptomaines are precipitated from urine by the reagents employed in the proportions cited, and one of my friends has been good enough to perform control experiments with Hofmeister's and other tests for animal alkaloids given by Von Jaksch in his work on Clinical Diagnosis.[4] In trying several of these reactions it was found that the results differed materially, and it appears therefrom that the excessively complicated nature of some of the bodies present in healthy urine, and still more so in urine under pathological conditions, renders it well-nigh impossible to be sure as to what one is doing. Under these circumstances lengthy investigation would be necessary to show where the differences lie, and the work would be very complicated. Attempts have been made to eliminate the source of possible error, but without any marked success. Von Poehl, however, is my authority for the methods employed, and to use his own words, "le précipité se compose de leucomaines à l'état de phosphotungstates." The urea has been estimated by the ureameter of Southall, and it is interesting to note that in comparing the relation between the weight of the phosphotungstate precipitate and that of the urea as estimated for the same twenty-four hours it will generally and almost invariably be found that they are in inverse ratio. When the proportion of the precipitate is high the estimated quantity of urea is low, and *vice versâ*. The exceptions to

TABLE I.—*Showing Daily Amount (in grammes) of Leucomaines and Urea passed during Twenty-four Hours for Ten Days by Four Healthy Persons unaccustomed to Exercise on Ordinary Diet.*

First ten days, without exercise.		Second ten days, with exercise.		First ten days, without exercise.		Second ten days, with exercise.		First ten days, without exercise.		Second ten days, with exercise.		First ten days, without exercise.		Second ten days, with exercise.	
Leucomaines.	Urea.	Leucomaines.	Urea.	Leucomaines.	Urea.	Leucomaines.	Urea.	Leucomaines.	Urea.	Leucomaines.	Urea.	Leucomaines.	Urea.	Leucomaines.	Urea.
7·5	38	10	32	9	40	10	38	8.4	36	9·5	36	7·2	35	9·9	36
9·3	33	13	33	8	36	10	36	7·5	33	10·8	38	6·9	35	9·2	38
9·0	33	10·5	32	7	35	10	35	7·9	35	10·2	38	7·5	38	9·5	35
10·3	32	11·3	33	9	38	10	33	8·2	38	10·0	35	7·9	36	9·0	37
9·75	36	12·2	32	9	38	9	38	7·8	32	9·9	38	9·0	36	9·2	33
6·5	32	11·8	34	10	33	10	35	9·5	33	9·5	38	8·5	35	8·9	35
7·8	37	11·5	32	7	35	10	33	9·2	33	10·0	33	7·9	35	9.2	35
9·2	38	12·2	35	7	38	10	32	8·5	35	10·0	35	8·2	38	8·4	38
9·0	35	11·5	33	7	38	11	36	7·5	32	11·2	36	7·4	32	9·7	35
10·3	33	11·0	31	9	35	10	36	7·2	35	10·0	35	7·4	35	9·2	35

TABLE II.—*Showing Daily Amount for Thirty Days, in Grammes, of Leucomaines and Urea passed in the Urine of an Anæmic Person treated by Rest, Massage, and Exercises.*

Leucomaines.	Urea.	Leucomaines.	Urea.	Leucomaines.	Urea.
6·5	33	7·5	36	7·9	38
6·2	33	7·2	38	8·2	38
6·5	29	9·2	38	10·2	36
6·5	32	8·5	35	10·0	36
7·0*	33*	7·0	33	8·5	38
8·2	35	7·2†	33	8·5	35
7·5	35	9·5	38	9·2	35
9·2	35	10·0	36	9·5	35
7·5	36	10·2	38	9·0	35
7·2	33	9·2	38	7·5	36‡

* On fifth day massage commenced.
† On sixteenth day active exercises added.
‡ From thirtieth day onwards the average of leucomaines passed was 7·5 grammes, and of urea 35 grammes.

[3] See also Herter on Intestinal Putrefaction in certain Neuroses, New York Medical Journal, Jan. 27th, 1894; Macpherson on Disinfection in Acute Insanity, Journal of Mental Science, January, 1893; and Uric Acid in Causation of Disease, by A. Haig. (London: J. & A. Churchill, 1894.)

[4] Von Jaksch: Klinische Diagnostik, p. 116.

this have been so rare that they may be regarded as unimportant.

In regard to Table III., it must be borne in mind that the amount of urea has been computed from the volume of nitrogen gas evolved. But this nitrogen may represent urea *plus* other nitrogenous urinary constituents, normal and abnormal; therefore, if my experiments are correct, the presence of leucomaines appears to interfere with the elimination of azotised waste product, for even when the phosphotungstate precipitate is heavy the volume of nitrogen does not seem to increase proportionately. While, then, I do not desire to lay great stress upon the comparative quantity of the leucomaine precipitate on the one hand, and that of urea computed by the hypobromite test on the other, as the conclusions drawn therefrom may be based on error, there still remains the clinical fact that when Von Poehl's test shows a heavy deposit certain conditions of disturbed function appear to be associated therewith, and it would appear that these functional derangements may be regarded as symptoms of retention poisoning. That uric acid is not the only factor in the production of the symptoms which I believe to be due to the presence of incompletely oxidised bodies in the system is shown by the fact that in many cases there is distinctly low tension.

Now in every case of healthy urine the amount of the precipitate (which for the purpose of this address I shall assume to be correctly deemed to be composed of leucomaines or of these alkaloid *plus* other products of nitrogenous waste incompletely oxidised) is very small compared with the quantity thrown down from morbid urine. Again, the amount of urea, although it varies somewhat in health and disease, is usually greater in the former case. In a case of melancholia or profound depression, in which an attack of influenza for the time being was attended by complete remission of all the mental symptoms, the patient during the period of pyrexia losing all despondency, dread, and insomnia, it was most remarkable to see the fluctuation in the amount of leucomaines before, during, and after the pyrexial attack. (See Chart I.) During the first four days of the disease the temperature rose from 97·8° to 102·5° F., with an intermission of one degree on the evening of the third day. From this point it gradually declined, reaching the normal on the ninth day and never again rising, though occasionally subnormal. The quantity of urea excreted was 26 grammes on the first day. From this point the quantity rose considerably with the temperature, reaching 40 grammes on the fifth day, and declining thence to 33 on the twelfth day, between which point and 35 grammes it remained. The quantity of leucomaines was 17 grammes at the beginning; by the third day it had risen to 21, whence it declined steadily to 13. During the following twelve days it remained at this point or below, save that on two occasions it rose to 15 and on one dropped to 10. On the seventeenth day it suddenly fell to 9·3. Those who are familiar with cases of nervous depression often meet with those of intermittent melancholia in which sometimes with regularity, at others irregularly, the patient presents all the features of most profound depression and mental morbidity, with abject inability to believe that there is any hope of betterment or of avoiding catastrophe on one day, and shortly after, without apparent cause, the demon of misery, irritability, and dejection is supplanted by cheerful freedom from all mental depression and physical malaise. How are we to account for these hitherto inexplicable variations in the subjective symptoms of one and the same individual occurring within a few hours? I believe that the explanation will be found in the ebb and flow of the tide of toxines manufactured and accumulated in the system. The habits of these persons are often sedentary, or tend to become so under the influence of the weird sensations in the head, the vague disorders of the digestion, and the semi-incoördination of the limbs from which they suffer. On examining the urine in such cases, before I was acquainted with Von Poehl's test for leucomaines, I often noticed the presence of oxalates and urates in excess and the small excretion of urea, in one instance the amount per diem of this last substance falling as low as 24 grammes. Since I have employed Von Poehl's method only two opportunities have arisen for noting the incidence of leucomaines in persons suffering from paroxysmal neurasthenia. In both cases the attacks of mental and physical exhaustion have come on without any cause assignable by the patients. In each case vertical and occipital headache, insomnia, mental agitation, hopelessness, and emotionalism have been attended by extreme physical languor and general aching weariness in the back and limbs. Both occurred in otherwise healthy men leading active lives, and certainly in one there was no psychical or physical cause for the sudden supervention of neurasthenia. In the other, possibly overwork of a sedentary

CHART I.

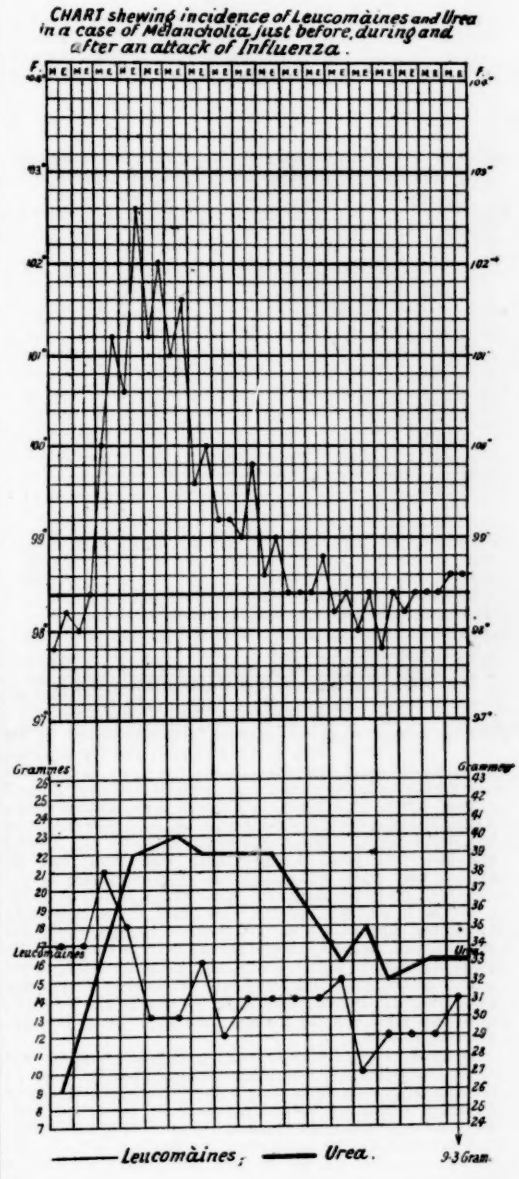


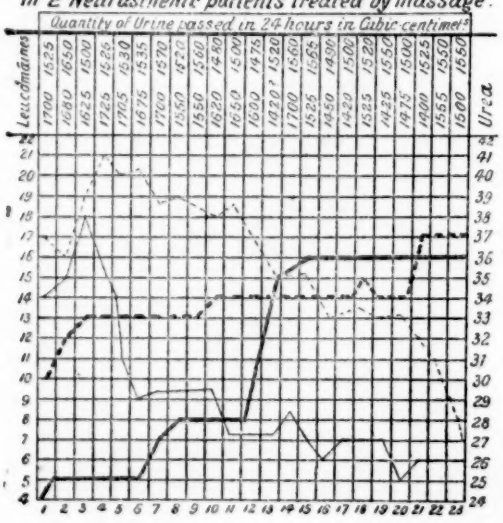
CHART shewing incidence of Leucomaines and Urea in a case of Melancholia just before, during and after an attack of Influenza.
Grammes
Leucomaines
Urea
Leucomaines; Urea.
9·3 Gram.

nature may be regarded as a determining factor. Now on examining the urine on each occasion of recurrence of the nervous symptoms a heavy precipitate of leucomaines was observed. At the commencement of treatment by vigorous massage, rest, a light nutritious diet, and mild saline aperients the amount of leucomaines excreted at first increased, but in the first week there was a decrease in the precipitate, which gradually fell in the course of three weeks in one case, and five in the other, to a small quantity, no

greater than has been observed in health, while the urea excretion increased. (See Chart II.) *Pari passu* with these changes in the urinary conditions the nervous symptoms of these patients improved and the attack passed off. Now it may be quite fairly alleged that since in the one case complete remission had occurred without any treatment on more than one occasion credit is not to be too readily given to the means employed for the oxidation and elimination of the toxines; yet in face of the evidence in the other case which I shall lay before you, I think that incomplete oxidation of toxines having been recognised during the attack, which passed off with a diminution of their appearance in the urine, it may be conceded in the light of the future history of this patient that

CHART II.

CHART shewing incidence of Leucomaines and Urea in 2 Neurasthenic patients treated by massage.



the advantages of oxidation were fully established in his case. This patient, who had been almost entirely incapacitated for his usual occupation during five years by reason of constant breakdown, mental and physical, has kept himself in good health by following my *regime* in regard to exercise. Before he came under observation he had led a very sedentary life, never taking any exercise worth speaking of. During the last two years he has been free from his old enemy, only rarely consulting me—I think thrice only—for slight occipital headache. This happy issue out of his affliction I attribute to the fact that he is constantly employing his leisure in doing those things which are requisite and necessary as well for the body as the soul. He plays lawn-tennis, fences, sculls, and rides according to the season of the year, and has lately developed a very pretty taste for golf. In other words, he is fostering the processes of oxidation initiated by massage and kept up by healthy, vigorous exercise.

It would be easy for me to multiply instances from my case book illustrating the advantages of oxidation in cases of anæmia, glycosuria alternating with uricacidæmia, and other maladies which are obviously conditions associated with incomplete oxidation, in which the promotion of the oxidation processes by the employment of massage, athletic and mechanical exercises, and the use of red bone marrow or injections of spermine, has been attended by the happiest results; but time will not permit, and I will only cite one case which has recently come under my notice fully bearing out the advantages of oxidation in auto-intoxication. A very vigorous, robust friend, who is one of the most athletic of muscular Christians I have ever met, was prevented by an accident from carrying out his usual round of healthy exercise. He straightway fell into a melancholy, peevish condition and consulted me. We devised means for repairing the damaged ankle and I bade him resume his accustomed pastime. While awaiting the opening of the shooting season he accepted an invitation to a country house which for some reason fell through, and my patient, disappointed of his lawn-tennis, became more irritable and felt himself much aggrieved. In his urine I had found ample evidence of deficient oxidation, and suggested various exercises possible in town, of which he would have none; but one morning he arrived in my consulting room radiant and glowing with good health and spirits, when I found that he had taken a leaf out of Mr. Toole's book in the play of *The Upper Crust*. You will, perhaps, remember that the gentleman of sudden fortune whose part is played by Mr. Toole, after being annoyed by the snubs of his aristocratic guests, sticks his thumbs into his armholes and truculently announces, "That rascal Grubbins didn't touch 'is 'at to me this mornin'; I'll go and give 'im something." My friend, in much the same frame of mind, having received an annoying letter among his morning correspondence, went forth and hired a pugilist for a twenty minutes' "mill," whence he came back to me announcing where he had been. All the irritability and despondency had been worked off in self-defence, and due oxidation had been re-established. The next day there were only traces of leucomaines in the urine. (See Table III.)

TABLE III.—*Effect of Pugilistic Exercise on a Healthy Person temporarily Sedentary.*

Amount of urine.	Leucomaines.	Urea.	Condition.
	Grammes.	Grammes.	
1600 c.c.	4·5	38	
1525 c.c.	5·9	42	Headache owing to lack of usual exercise; irritable.
1500 c.c.	4·5	39	
1480 c.c.	6·9	35	
1500 c.c.	7·2	33	
1275 c.c.	6·9	33	Exercise.
1625 c.c.	13·2	35	Cheerful.
1550 c.c.	10·0	38	Quite well.

Gentlemen, at the outset I warned you that my remarks would assume a suggestive, not a constructive character. Now what I am going to say will be speculative rather than suggestive, so that it may fairly be regarded as unpractical and therefore valueless; but we who are not always able to verify our opinions, and who carry out the work of our lives and base most of our practice on what, after all, is only opinion, know that, however valuable scientific certainty must be, there are times when unconscious knowledge, medical instinct, intuition—call it what you will—comes to our aid and guides us to a correct decision, why and wherefore we are never able to formulate. This confession of a fact, which we all recognise even if we will not acknowledge it, must be my excuse for the following speculations. Granted that there is a great family likeness between the toxines due to physiological processes and those of bacterial origin, that both may be anaerobic and by oxidation will be rendered easier of elimination, does it not seem probable that in most cases, if not in all, the presence of pyrexia denotes the existence of toxæmia, and fever is only a vigorous and sometimes over-energetic method of nature to oxidise these matters and so get rid of them either by burning them up or by making them ready for excretion? Under these circumstances high temperatures, so long as they are not hyperpyrexial, may not be altogether without beneficence. If I do not weary you, let us note for a moment the parallelism between the prodromatous symptoms of the acute fevers and the usual concomitants of chronic functional nervous disorders. In both we find general malaise, rachialgia, prostration, nervous and muscular, disordered digestion, headache, derangements of sleep, and mental disturbance. Nor does the similarity end here, for in not a few instances of so-called nervous maladies we meet with pyrexia, as in the hysterical hyperpyrexia known to us all. May not the fevers of over-fatigue, of hysteria, and of zymotic disease proceed from one and the same cause? Not, indeed, of common origin, for in the one set of cases we are dealing with auto-intoxication without the intervention of bacterial agencies; in the other the infection is introduced from outside. How often we see the temperature of little children running up to a great height as the result of some transient disorder of digestion and subsiding equally rapidly under the administration of a little dose of

calomel, at once an intestinal disinfectant and an eliminant. Is not the hyperpyrexia in these cases an effort of nature to oxidise, and thus aid in the elimination of leucomaines or ptomaines absorbed from the gastro-intestinal tract? There is, however, another small point in reference to disturbance of digestive function to which I should like to allude before passing on to the brief consideration of other conditions pointing to the importance of oxidation. In cases of chronic disease depending on, or associated with, deficient oxygenation, we find dyspeptic symptoms markedly present, and of these one of the most frequent causes is butyric fermentation. Now, as you are aware, while lactic fermentation is aerobic and normal, when not excessive, butyric fermentation is always abnormal and anaerobic. This condition is very common among anæmic persons and those suffering from wasting maladies; sometimes, also, I believe, it is not uncommonly present in pneumonia. Under such circumstances the administration of the so-called ozonised water, which is really a solution of peroxide of hydrogen, proves valuable in checking the fermentation process. I have not myself had opportunities of testing the value of what our French neighbours manufacture and describe as "l'eau oxygénée" in acute maladies; but in the digestive troubles of anæmic, chlorotic, and obese subjects I have found this preparation exceedingly useful; indeed, I am not at all sure that I have not seen benefit arise from the simple practice of swallowing air, although under ordinary conditions of flatulent dyspepsia, due rather to lactic than to butyric acidity, we all know how greatly the discomforts of a recumbent patient are increased if we do not teach them to take liquid nourishment without swallowing quantities of air. May not the introduction of oxygen into the stomach prove useful in arresting the suffering which anaerobic fermentations set up, greatly adding to the already heavy burden which the patient with pneumonia has to bear? This gastric complication in acute maladies and its local treatment may be a comparatively trivial matter regarded in the light of the more serious and dangerous conditions arising out of deficient oxidation; yet, since we are not only engaged in the endeavour to save life and arrest disease, but also to assuage suffering and relieve pain, it may not be altogether beneath your notice.

I suppose there are few who would object to the general statement that all anæmic patients are constipated; but is it not equally true that most sufferers from constipation are anæmic or present signs of deficient oxidation? Every day clinical observations appear to point to the existence of more or less coprostasis as the cause of the bloodless condition. Compare the headache, foul tongue, depression, and irritability produced by a large dose of quinine with the similar conditions accompanying constipation and the absorption of toxines arising therefrom. Ehrlich's observations on the effects of quinine upon living cells have shown how these are deprived of their oxygen and reduced from a state of amœbic activity to an inert mass of almost spherical protoplasm. Now it has been shown that leucomaines and ptomaines are very readily oxidisable, or, in other words, that they are also like quinine, powerful reducing agents, and if we remember that oxidation and reduction processes are constantly alternating within the cells it is easy to understand how readily this rhythm may be upset by the presence in the blood of these poisons. On this point it would be interesting to obtain further information as to the relationship which I believe exists between the presence in the blood of toxic substances and the pale, almost waxy appearances associated with long-continued habitual constipation. We know that the large intestine takes a great share in the work of absorption. After the richer elements of the food have been elaborated, prepared, and absorbed by the stomach and small intestine, in the splendid economy of nature that which remains is so dealt with that we may regard the colon as the "chiffonnier," the mass of material finding its way into this last receptacle, being, as it were, carefully picked over, slowly and laboriously turned and stirred, until nothing that can be utilised for the purposes of nutrition is suffered to escape. When this purpose, however, takes too long in doing the chemical processes assume a putrefactive nature, and thus follows the introduction of poisonous in place of nutritive material. Now one feature in the character of ptomaines and leucomaines is their greed for oxygen. They are among the most easily oxidisable nitrogenous bodies, so when they reach the blood, either by absorption from the intestines or as the result of tissue waste, it is not difficult to explain the anæmia, blood starvation, and deficiency of oxygen which we recognise as salient symptoms in the condition of so many who consult us. The same struggle for life which has been so brilliantly described by the Russian scientist as existing between phagocyte and microbe would appear to occur chemically rather than physically between the invading horde of leucomaines and the army of peaceful red corpuscles engaged in the labour of obtaining, conveying, and giving up the oxygen necessary for the life of the tissues. How often do we not see the history of communities simulated—nay, almost repeated—in the physiological story of our own bodies? The unstable, half-starved, ill-conditioned nomad sweeps down from his mountain fastnesses upon the hard-working, somewhat sleek, and certainly unwarlike pastoral population of the plains. So it is with these conditions of deficient oxidation; not only do we find bodies formed which are in themselves evidences of oxygen poverty, but when formed and absorbed from without they not only seize upon the surplusage but deprive the blood and tissue cells of their fair share of oxygen. In examining the blood of persons suffering from constipation who have also exhibited anæmic and neurasthenic symptoms the corpuscular value is not often found to be decreased, but the proportion of hæmoglobin is usually below the normal in all such cases, so that in conditions of bloodlessness due to auto-intoxication we do not find at first a diminution in the numbers employed for conveying oxygen to the tissues, but a deficiency in their load; thus the anæmia is qualitative rather than quantitative. Under these circumstances elimination alone will not suffice to restore the health of the patient, but means must be taken to promote also oxidation processes in themselves favourable to the destruction or evacuation of the offending matters.

It is interesting to note in connexion with the processes of oxidation the swing of the therapeutic pendulum of the day. We have our attention on the one hand constantly drawn to the virtues of numerous antipyretics of coal-tar origin, all of which owe their action to their reducing qualities, while on the other hand we are beginning to recognise the value of animal extracts, the majority being remarkable for their potency as oxidising agents. I cannot help thinking that we are apt to be too prone to avail ourselves of the antipyretic series, while perhaps we are not plucky enough to make as much use as we might of the oxidising properties of organic extracts. We find that retention of toxines, the products of incomplete oxidation, means prostration, depression, and general misery, whereas their elimination is attended by cheeriness and restoration to comfort of body and peace of mind, as in the cases already cited, where influenza arrested melancholia and a bout with a prize-fighter restored equanimity.

I have tried to suggest some of the advantages of oxidation and the probable relationship between various obscure nervous states and deficient oxygenation. In our practice to-day we are called upon to treat a generation which is beginning to escape from the hereditary consequences of mercury and bleeding prescribed to their forbears. Evidences of attenuation are growing fainter, robust and sthenic types are not so rare as heretofore. The "Lydia Languish" of yesterday is being ousted by "Mary Fenwick's Daughter" of to-day; but we still meet with examples in both sexes of persons who, in spite of the fact that they were evidently meant to take plenty of healthy exercise and to breathe deeply draughts of fresh air, will not find time or opportunity for duly oxygenating their blood and oxidising their tissues. It is our duty to enforce on our patients the paramount necessity of caring for their bodies, and in a race so addicted to out-door pursuits and so fond of sport it is not often that difficulties are placed in our way. But spasmodic efforts to perform the allotted task make pain of pleasure, and too vigorous exercise after a long spell of inaction does more harm than good. The combustion processes must be maintained with regularity as well as vigour. We must endeavour to foster the chemical interchange between the blood and the tissues necessary to health by such means as will induce the introduction of sufficient oxygen and the more active oxidation of organic matters, raise the temperature, increase the secretions, and stimulate respiration and circulation.

FOOTBALL CASUALTY.—In a match, on the 26th ult., between the Excelsior and Brighton Teachers' teams, a player in the former team fractured his clavicle.

GLEANINGS FROM SURGICAL PRACTICE.

BY THOMAS BRYANT, M.CH., F.R.C.S. ENG. & IREL.,
CONSULTING SURGEON TO GUY'S HOSPITAL; PAST PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, &C.

II.[1]—RUPTURE OF THE LIVER.

THIS injury, although always grave, is not of necessity fatal, for it is capable of being repaired. Preparations (Nos. 1948[a] and 1951[b]) and drawings in the pathological museum of Guy's Hospital clearly illustrate the truth of this observation. When recovery follows this injury such cases have been usually classed and treated as examples of traumatic peritonitis, their true nature not being at the time revealed. The amount of injury to the liver must, however, when life has been saved, always be limited, and the case otherwise not seriously complicated. In a general way, when a liver or spleen is lacerated death from shock and hæmorrhage speedily follows the injury. In exceptional cases the patient may survive a few days. Thus, out of nine consecutive cases of ruptured liver admitted into Guy's Hospital five died rapidly and three (men) survived three, seven, and nine days respectively.

CASE 8. *Fracture of the ribs on the right side, with rupture of the liver; death on the fourth day.*—An old man aged seventy-one was admitted into Guy's Hospital with fracture of some of his right ribs, but without any abdominal symptoms. Bronchitis ensued, and death occurred on the fourth day as a result. After death a rent was found in his liver, which was filled with blood-clot and reparative material, which, if he had not had other complications and had possessed more reparative power at the bank of health to draw upon, would doubtless have completely closed up. There was no blood in the peritoneal cavity.

CASE 9. *Injury to the head and abdomen; death from secondary hæmorrhage from ruptured liver.*—A man aged forty-five fell from a cart when intoxicated, and the wheel was said to have passed over his head. Intoxicated to an extreme degree, he was admitted, under Mr. Birkett's care, into Guy's Hospital, presenting neither collapse nor symptom of either abdominal or even cranial mischief beyond some hæmorrhage beneath the right conjunctiva. He was put to bed and soon fell asleep, and on the following morning, with the exception of the hæmorrhage into the orbit, no signs of internal mischief could be detected. Rest, however, in the horizontal position was strictly enjoined; but to this he would not submit, and thirty-six hours after the accident he got up, walked about, and, with a sudden pain in his side, fell back and died. After death a fissured fracture of the skull was found passing across the right orbit, without brain complication; and about a pint of blood existed in the peritoneal cavity, which had evidently escaped from a severe laceration of the liver—a mass the size of a man's fist, situated in the right lobe, having been nearly separated. The right kidney was also fissured on its convex surface, and the fissure was covered with coagulated blood. In this case the man clearly died from rupture of the liver, which at the time of the accident was not associated with either collapse or bleeding; the injured mass, however, subsequently became separated by the patient's walking, and death from secondary hæmorrhage was the result. Had this incident not taken place recovery might have been possible.

CASE 10. *Ruptured liver; death on the twenty-eighth day.*—A woman aged forty-two, much given to drink, was admitted into Guy's Hospital under my care on June 23rd, 1876, having been brought in by the police in a state of intoxication after she had been injured in a drunken row. When seen by the house surgeon, besides a wound of the lip and some head bruises, there were indications of local injury over the right lower ribs, where she had apparently been kicked, and a rough diagnosis was made of fracture of these ribs, for which she had her side carefully strapped up. The woman apparently went on very satisfactorily for seven days, when chest symptoms appeared, involving both lungs, and within a week she became very ill, so that she died with chest complications on the twenty-eighth day. At the necropsy the bronchial tubes in both lungs were found to be full of mucus, and the right lung was in a state of grey hepatisation, particularly at its base. The liver weighed fifty-four ounces, and in it there was a large abscess which occupied the greater part of its right lobe; the abscess extended up to the diaphragm, which formed its upper wall and below came within half an inch of the under surface of the liver. The contents of the abscess were broken-down liver structure, blood, and pus. It seems tolerably clear that in this case the abscess formed as a consequence of injury to the liver and of effusion of blood into its structure; and it seems also probable that if the woman had been in better health repair from the injury might have taken place.

CASE 11. *Ruptured liver; death on the eighteenth day.*—A man aged twenty-nine was admitted into Guy's Hospital after having received a kick in the region of his liver. He was collapsed on his admission, but soon rallied and complained only of local pain. In a few days symptoms of peritonitis appeared of a localised and chronic nature, and the man sank on the eighteenth day. After death a fissure two inches long and one inch deep was found in the anterior edge of the liver along the fissure for the gall-bladder; this rupture was full of blood-clot, and the tissues about were matted together with reparative material. The gall-bladder was also ruptured to the extent of three-quarters of an inch in the line of the liver, and the edges of the ruptured walls were inverted. There was no bile in the gall-bladder, and no evidence of any having been extravasated. The opening in the gall-bladder was sealed with lymph. In this case the possibility of ultimate repair being secured might reasonably have been entertained, under the most favourable circumstances, if a suspicion only of the nature of the case had been excited in the surgeon's mind who had it in his charge; even as it was nature had done much to repair the mischief which had existed.

CASE 12. *Ruptured liver; fractured right lower ribs; laceration of the stomach; death on the nineteenth day from peritonitis.*—I must quote one more case to illustrate this part of my subject, for I know of no better example of ruptured liver and complications in which nature's efforts of repair were so nearly successful. A man aged thirty-seven was admitted in 1867 into Guy's Hospital under the care of the late Mr. Hilton, having been crushed between the buffers of two railway carriages applied respectively to the epigastric region and back. As an immediate result of the accident he fell insensible when released, but he recovered his senses in a few minutes and was soon admitted into Guy's Hospital cold and speechless. When put to bed he retched a little, but did not vomit, and as reaction appeared he complained of epigastric pain and liked to rest on his left side. It was made out at the time that the ribs of his right side below the fourth were fractured, but no other diagnosis of injury was framed. His urine was natural. He soon complained of thirst, but on taking some milk it was rejected, but without blood. In two days he had much improved and took a small piece of meat. His bowels also acted naturally. He complained, however, of pain across his chest and of some tightness at the pit of his stomach. His respiration was quiet and he had no cough. The abdomen was slightly distended. On the seventh day his bowels became loose, but he did not pass blood in his stools. His respiration also became thoracic. On the eleventh day the abdomen had become more distended; on the fourteenth this had increased, and a pleuritic rub appeared over the left lower ribs (uninjured side); on the sixteenth day he wanted more food; and on the nineteenth he died as if choked. At the necropsy the right ribs were, as suspected, found to be fractured, and the right pleura was full of serous fluid compressing the lungs. The peritoneal cavity contained some stringy lymph which was blackened from blood which had been mixed with it. There was lymph also about the liver of a yellow saffron colour. The liver was adherent to the diaphragm, and on its upper surface, about its centre, there was a rupture to the extent of two inches.[2] The stomach was adherent to the liver, and at the seat of adhesion on its anterior wall there was an irregular rent of the mucous membrane nearly three-quarters of an inch long by a quarter of an inch wide, and at one end of the rent the peritoneal coat was perforated; the opening was, however, completely closed by adhesion to the liver. There was no evidence of extravasation of blood or of the contents of the stomach having taken place, and all the injured parts were well glued together. This case is full of interest, although the absence of all or any symptoms which might have suggested the nature of

[1] No. I. was published in THE LANCET of Nov. 2nd, 1895.

[2] Preparations, Guy's Hospital Museum, No. 593.

the injuries which had been sustained was very remarkable. That the ribs were extensively fractured by the squeeze was but natural, and that the convex surface of the liver was ruptured by the same force was also what might have been expected; but that there should have been a laceration of the stomach without symptoms is difficult to explain, unless this fact is made intelligible by supposing that the original rupture of the stomach brought about by the squeezing force had been incomplete and had not extended sufficiently far through all its coats to allow of extravasation. Under these circumstances the progress of the case seems explicable. Had the chest mischief been less severe I am disposed to think that a complete recovery might have been secured to both the hepatic and stomach mischief.

With respect, therefore, to the diagnosis of rupture of the liver, it must be confessed that there are no special symptoms which can be accepted as being indicative of its existence, although severe shock and collapse as immediate results of a forcible local injury to the right side of the abdomen or to the lower part of the right side of the thorax should always suggest its probable existence; and even when the same kind of injury to the same regions is unattended by any such serious symptoms as have been just alluded to, the surgeon should be alive to the possibility of a limited rupture of the liver being present, and he should treat the case accordingly. The cases quoted afford ample evidence to support the truth of this proposition, and are more than enough to support a diagnosis which includes a possibility of serious mischief to the liver in spite of an absence of serious general symptoms when the nature of the injury has been such as to render it probable that such an injury may have been sustained. Had such a possibility been a prominent thought in the minds of those who had the treatment of the cases I have quoted I am tempted to believe that the cases themselves would not have been in my possession, since a recovery might have been secured in the majority of them.

With respect to the diagnosis of rupture of the spleen the remarks which I have just made with reference to the liver are equally applicable. It is to be recognised that cases of limited rupture of this organ, as of the liver, are quite reparable, as illustrated by Preparation 2018 in the Guy's Hospital museum, taken from a body seven days after the injury, and that when such cases recover they, during life, have most probably been regarded as examples of local traumatic peritonitis. In Case 3, already quoted, there was no suspicion of such a form of injury being present, and it was not till a fatal termination of the case by an acute peritonitis that an opportunity of finding out its cause was afforded to the surgeon. When a severe laceration of the spleen has taken place death from shock and collapse due to hæmorrhage is the common result. When the laceration is limited the case may be overlooked and regarded as one of peritonitis. The cautious surgeon should, however, in all cases of injury from any local force applied to the left hypochondriac or lower thoracic region, whether with or without general symptoms, have the possibility of its presence before his mind, and this possibility, however remote, should always lead him to treat his patient with all the care and precaution as if, indeed, he felt sure that this kind of injury existed. The observance of such care, under all circumstances, must be beneficial, its non-observance may be fatal.

Rupture of the stomach when complete is a very fatal injury, shock and irrecoverable collapse, as a rule, speedily following the escape of its contents into the abdominal cavity. When incomplete—that is, when only its mucous lining or peritoneal covering, with or without its muscular coat, is involved—recovery is not impossible. When the external injuring force is applied to the fully distended stomach a rupture is more likely to take place than when it is empty, and this rupture may be either complete or incomplete. In the last case reported (Case 12) it is reasonable to believe that the rupture had been incomplete and had not extended sufficiently far to allow of extravasation of its contents to take place, for no blood was vomited although the stomach rejected food, and there were no primary symptoms to indicate any injury to the organ. In the Guy's Hospital museum there is a preparation (No. 592) showing a laceration and detachment of the mucous membrane of a stomach over an area of about two inches, extending transversely around the middle of the organ to within an inch on either side of the greater curvature. It was taken from a boy aged nine who had been run over by an omnibus and who shortly after admission vomited a blood-stained fluid and died the next day; in addition to the stomach injury, there were found laceration of the liver, extravasated blood behind the pancreas, and a broken thigh. There is likewise a second preparation (No. 594) showing two extensive lacerations in the peritoneal and muscular coats of the stomach, and a very slight tear in the mucous membrane. It was taken from a man who was brought into the hospital dead, having fallen thirty feet on to the deck of a vessel.

That the incomplete separation and laceration of the mucous coat of a stomach, as revealed by the specimen at Guy's Hospital, are clearly possible is an important fact, and I have good reason to believe that the same accident may occur to the intestines and even bladder, and that persistent or intermittent hæmorrhage from either of these organs following injury should suggest its presence. Thus, a man aged thirty-nine fell thirty-five feet upon his abdomen and subsequently passed blood mixed with his motions for seven consecutive days, associated with local tenderness over the colon, and then recovered. I suspected laceration of the mucous membrane of his colon, and upon such a diagnosis treated him successfully. And in a boy about fourteen years of age, who fell from a height upon his perineum and subsequently had hæmaturia and passed fresh clots and pure blood with his urine for some days, accompanied with pain, when there were no indications of urethral or renal mischief, the same diagnosis was rendered probable. At any rate, of this I am sure, that whenever, as a result of an abdominal injury, blood is found to be mixed with the vomit and vomiting recurs in small quantities at intervals, the probability of this symptom being due to a rupture of the mucous lining of the stomach should be entertained and the treatment of the case modified by this opinion.

Grosvenor-street, W.

SPORADIC GOITRE: ITS VARIETIES, AND THE RESULTS OF MODERN TREATMENT.

BY GORDON HOLMES, M.D.,

PHYSICIAN TO THE MUNICIPAL THROAT AND EAR INFIRMARY, LONDON.

History.—We may assume that goitre was known objectively in the earliest periods of medical science, although there are no definite allusions to the affection in th Hippocratic writings. In the first century the Alpine goitre were familiar objects in the public eye, as even a non-medical writer, Juvenal,[1] exclaims by way of popular illustration:—

"Quis tumidum guttur miratur in Alpibus?"

Before the third century the Greeks had devised the words[2] "bronchocele" and "tracheocele" to designate such tumours, but nevertheless without understanding anything of the special character of enlargements of the thyroid gland. To their view, in fact, goitre was differentiated by position only from scrofulous swellings of the cervical glands.[3] This confusion existed even until quite modern times, whence the term "struma" is still used for goitre in German nomenclature. The first essay, indeed, to segregate bronchocele from other tumours of the neck does not come to us till 1610, when Riolan[4] demonstrated that a sharp line of distinction should be drawn and goitre relegated to a class apart. Other writers followed his lead until the question was definitely settled. With respect to goitre accompanied by exophthalmos, &c., the general recognition of this malady is almost of contemporary date. The disease, however, was observed clinically and adequately described long before the time of the men whose names are so intimately connected with it. In 1786 Caleb H. Parry of Bath noticed a case of exophthalmic goitre and subsequently many others; but, though a copious writer, his observations in this department only came to light in a posthumous work[5] published in 1825. Parry's experiences, however, were ignored by, or never gained the attention of,

[1] Sat. xiii., 162.

[2] Galen: Finitiones Medicæ (ascr.), Opera Omnia; Venetiis, 1554, tomus i, p. 155c. Paulus Ægineta, l. vi., cap. 38.

[3] Fabricius Hildanus: Obs. et Curat. Chir., Obs. 34, 35, cent. iv., 1619.

[4] Opera Omnia, p. 632. Paris, 1610.

[5] Collections, &c., vol. ii., p. 111. London, 1825.

the profession at large. In 1835 Graves of Dublin began to give demonstrations of exophthalmic goitre, and his prominent position as a clinical teacher at once brought the disease into general notice. He was, presumably, unacquainted with Parry's work in the same field. Yet Graves published nothing on the subject till 1843, when he included an essay on the malady in his "Clinical Medicine."[6] In the meantime (in 1840) Basedow of Merseburg brought out a monograph[7] on this form of goitre, which at once attracted notice in Germany. Subsequently exophthalmic goitre has been commonly called "Basedow's disease" by the Germans, but has been better known as "Graves' disease" in other countries. The same credit seems to be due to both men as clinical observers, their originality never having been questioned, but the considerable priority of Parry's observations is altogether beyond dispute.

Semeiology.—In a London throat clinic goitre is met with in three almost sharply defined manifestations. 1. Tumours variable in size, but never very large, variable also in consistency, and apparently of purely local significance. The swelling is not usually remarkable for its symmetrical outline; it may extend across the whole front of the neck or exist only on one side or in the middle. When the whole thyroid gland is involved one lobe may be implicated much less than the other; the isthmus may be the chief seat of enlargement or may appear as a well-defined depression between two lateral eminences. As a rule, the goitre is firm but compressible and more or less movable on the neck. In a minority of cases, however, it is remarkably dense. Some hard goitres have a very regular surface, whilst others are more or less irregular and may even give the impression of a rather rough stone wrapped in a covering of integument. 2. The second class of goitres is comparatively rare; it resembles the first class in seeming to be a purely local manifestation, but the tumour differs considerably as to shape and density. Regularity of outline, smoothness of surface, and concentricity are the rule. Occasionally, however, two or more swellings, conjoined to a greater or lesser extent, are met with. To palpation these goitres give a tolerably clear impression of containing fluid, and are, in fact, cysts. 3. In this division are to be reckoned a number of thyroid tumours, as a rule soft and puffy, and also diffuse and symmetrical, which generally commence in young people between the ages of about fifteen and twenty years. They differ from the two first classes in being allied, in a great majority of instances, to one or more of certain other symptoms—viz., nervous exaltation, neurasthenia, cardiac excitement, anæmia, and less frequently protrusion of the eyeballs (exophthalmos). Some of these, however, are probably merely examples belonging to the two former varieties in an initial stage. In the most pronounced cases the action of the heart is very tumultuous and the pulse may attain 140 or 150 beats per minute. Under these circumstances throbbing of the carotids may be so great as to produce a visible rhythmic movement of the goitre and to communicate a considerable systolic jerk to the hand if placed on the tumour. A murmur may be heard with a stethoscope. Whether there is a pulsation, an expansile movement in the substance of the swelling, is a doubtful point. Looking to the great vascularity of the thyroid body, which receives more blood than the brain, it might well be so, especially if the vessels were dilated or multiplied in proportion to the mass of the goitre. Another peculiarity of this kind of bronchocele is that a variation in size, perhaps at different periods of the same day, is liable to occur. It may happen that the tumour as a regular occurrence is larger in the evening, or the increase may be only occasional, concomitantly with indisposition, mental excitement, or the catamenial flow. As to the exophthalmos, it may be so slight as almost to escape notice, or may proceed to such an extent that the strain on the envelopes of the eye produces ulceration of the cornea. This, however, is rare, and I have not myself met with such a case. The patients when seen by the practitioner are generally in a very nervous condition, sometimes scarcely able to speak intelligibly from muscular tremor and paresis. Tremor and drooping of the eyelids are often noticeable. Anæmia is not constantly present, and occasionally the patient seems to be rather plethoric than otherwise. The evolution of symptoms in Graves' disease seems to take the following order: neurosis, cardiac excitement, goitre, and exophthalmos. But the thyroid gland may, of course, be in a morbid condition before its hypertrophy becomes apparent. All kinds of goitre may give rise to troublesome symptoms by pressing on the adjacent parts of the neck. The most common occurrence is dyspnœa from compression of the trachea, but we may also have neuralgia or aphonia from nerve pressure, or giddiness or vertigo from vascular disturbance, &c. When the windpipe is borne on by the tumour noisy respiration—i.e., "roaring"—may occasionally be observed. Such tracheal compression probably occurs only when the growth insinuates itself between the air tube and the sternum. An irksome feeling in the throat or stiffness in swallowing is not infrequently complained of. It is, however, altogether exceptional for a bronchocele to produce any decided subjective phenomena by its mechanical effect on contiguous parts. It may be mentioned that "metastatic goitres"—that is, tumours in various parts of the body having the anatomical characters of the thyroid gland—are sometimes met with.[8]

Pathogenesis.—Despite the persevering researches as to the etiology of goitre, and the immense literature which has accumulated around this disease, its immediate causation remains quite unknown. It is a matter of common knowledge that in certain mountainous districts all over the world goitre is an endemic affection. Popularly the water of the locality has always been accused of generating the swelling, but chemical analysis has not fixed on any substance which can be proved to have a goitre-producing faculty. Some observers, indeed, have abandoned the water theory and promulgated the hypothesis of a "goitre miasma." It seems certain, however, that goitre is a water-carried and not an air-borne disease, but no forecast can yet be made as to whether the honour of discovering the actual *materies morbi* will fall to the chemist or the biologist. To decide between mineral and microbe remains a crux to be solved by some future investigator.[9] It is a well-ascertained fact that "acute" goitre may occur in endemic districts, as when persons inhabiting other parts shift their residence to such places.[10] Families and bodies of soldiers have been thus affected suddenly and as promptly cured by removal. "Goitre wells" are also said to be known in Germany.[11] Some of the goitres arising about puberty and in connexion with pregnancy develop so rapidly as to deserve the name of acute. Considerable collateral advances have, however, been made in this field by the investigations of Ord and others, which show that myxœdema results from functional abeyance of the thyroid gland, and cachexia strumipriva from its deprivation—phases of the same pathological condition with different causation. Nor is cretinism, which is esteemed to be a further or hereditary stage of goitre, any longer supposed to result from calcareous deposits (aqueous) about the base of the skull impeding the flow of blood to the brain. It is now known to be the full manifestation of myxœdema when occurring in early life through congenital or artificial loss of the thyroid gland. Experiments have also shown that an apparent bronchocele can be produced in animals by feeding them with thyroid gland substance or extract, a valuable therapeutic discovery, though not enlightening us as to the origin of clinical goitre. We are also not so much in the dark with respect to exophthalmic goitre, although the advance is more in the nature of casting off from old beliefs than of anchoring fast to new ones. The etiological connexion between uterine derangements and this malady, urged by Graves, may now be put aside, considering that the train of symptoms are occasionally met with fully developed in the male sex. Besides, it is obvious that any serious disease occurring in females is almost certain to create a disturbance of the sexual functions. We no longer, with Kœben[12] and his school, look to the sympathetic system as the starting-point of the neurosis, but to the goitre itself.[13]

[6] P. 674.

[7] Exophthalmos durch Hypertrophie des Zellengewebes in der Augenhöhle. Casper's Wochenschrift, March 28th, 1840.

[8] See Lücke: Archiv für Klinische Chirurgie, Band ix., 1867, p. 88.

[9] Among those who have recently given their attention to this subject Kocher of Berne states that a micro-organism found in the water is the actual cause of goitre. He has produced the disease by practising injections on rabbits, &c. (Statistics of Goitre, &c., Berne, 1889.) On the other hand, Berry decides in favour of a mineral origin. (Brit. Med. Jour., June 13th, 1891.)

[10] See Nivet: Études sur le Goitre Epidémique. Paris, 1873.

[11] Berry: Loc. cit.

[12] De Exophthalmo ac Struma, &c.; Berlin, 1855. At first the nerve was thought to be affected by pressure of the goitre, but after Claude Bernard's experiments on the sympathetic the tumour itself was considered secondary to the nerve lesion.

[13] See Greenfield: THE LANCET, Dec. 16th, 1893.

If the symptoms arose from a primary nerve lesion it is evident that we should as a rule have one side only affected, with exophthalmia and goitre confined to that side. No case, however, of unilateral Graves' disease is on record. The thyroid gland, being in a morbid state, may allow some deleterious matter to remain in the blood or may contaminate it by pouring out some perverted secretion. Noting the symptoms arising from an overdose of thyroid gland, Greenfield[14] thinks the affection may represent the converse of myxœdema. But whether the tumour in these cases has a similar extrinsic origin to that of ordinary goitres is still altogether undetermined. Certain predisposing causes of goitre are very well marked, and at the head of these stands sex. Comparatively few cases of sporadic goitre are found in males, though it is said that the endemic form attacks both sexes alike. Next in order comes puberty or adolescence, when most goitres seem to manifest themselves; and further we have heredity, pregnancy, and the puerperal state. I have not met with evidence of heredity, which probably only becomes a factor in endemic districts. Exophthalmic goitre is sometimes met with in members of the same family, and several cases of sisters being so affected have been reported.[15] I have myself seen an instance of two sisters exhibiting the disease under circumstances which suggested a family predisposition.[16]

Pathological anatomy.—The thyroid gland consists of vesicles connected by areolar tissue, and it is larger in females than in males. In case of enlargement the necropsy may reveal a true hypertrophy in which the tumour throughout resembles the normal gland, or the increase may be confined to the parenchymatous elements, which have multiplied and become condensed, in some cases to such an extent as to extinguish more or less completely the function of the organ. In other instances one or more vesicles may have become dilated, afterwards coalescing to form large cysts, which still contain the yellowish fluid constituting their normal contents. If both processes advance together *pari passu* the goitre will consist of a number of cysts about the size of a filbert, more or less, with very thick walls. A veritable fibro-cystic tumour is thus formed, which sometimes attains to great dimensions. Sporadic goitre, however, rarely grows to be very large. In the hardest bronchoceles calcareous laminæ or granules may be found embedded in the substance; or we may have some tumour, fibroma, atheroma, &c. developed from a nucleus in the thyroid body.[17] A few necropsies have been obtained in cases of epidemic (acute) goitre. Here the condition is one of increased vascularity and fibrous hypertrophy. Small cysts may be formed, and the epithelium of the vesicles is infiltrated with granulations.[18] The structural distinction between exophthalmic goitres and those of purely local significance is believed in by most writers on the subject. So far, however, nothing has been formulated. Necropsies have not revealed the development of any "spongy erectile tissue," the existence of which has been imagined by some observers in order to explain the pulsatory impulse and variability of size. According to Shingleton Smith[19] the gland is in a state of "villous and vascular hypertrophy," but Greenfield[20] denies the vascularity; he thinks it, in fact, less than normal. In the view of this, the latest, observer, the thyroid is in a condition of rapid glandular evolution, seen in nothing else but the development of an adenoma. On the whole, perhaps, the appearances are not different from those to be seen in any actively growing goitre. Such patients soon apply to the practitioner, and the disease, if it terminates fatally, runs a comparatively short course. Thus necropsies are likely to be obtained in an early stage of the thyroid growth. Very hard goitres and cysts proper do not appear to be pathologically connected with Graves' disease. Traube and Recklinghausen,[21] however, speak of sclerotic and cirrhotic conditions being found. Semon[22] also states that every form of bronchocele may be met with in conjunction with exophthalmos. The associations, under such circumstances, may be deemed fortuitous. Morbid changes are usually found in the sympathetic nerves, but by no means always, swelling and hypertrophy of ganglia, and degeneration of ganglionic cells. Disease of the central nervous system also exists, and perhaps invariably, but the alterations have not yet been tracked out. Germain See,[23] in fact, considers that the phenomena spring from paralysis of the pneumogastric, and Filehne[24] has even shown that section of the restiform bodies in their anterior fourth produces symptoms in rabbits, &c., very suggestive of Graves' disease. It is a rather curious fact that the cause of exophthalmos has not yet been elucidated satisfactorily by any post-mortem researches. Certain lesions have often been found, such as hyperæmia and extravasation in the retina and choroid, adipose deposit in the cellular tissue of the orbit, &c., but such manifestations do not explain the protrusion of the eyeballs. This phenomenon must, therefore, be the result of transitory conditions, probably vascular engorgement, with more or less serous effusion, and tonic muscular spasms, which disappear with life. In long-standing cases every variety of organic heart disease has been found.

Diagnosis.—Some writers seem to include every tumour of the thyroid gland under the name of goitre. Thus, even cancer of the organ may be denominated malignant goitre. As a rule, however, we understand by goitre, or bronchocele, only those tumours of specific though unknown origin which I have been dealing with in the present paper. The general diagnostic sign of enlargement of the thyroid gland is that the tumour follows the upward movement of the larynx in deglutition. Too much importance should not, however, be attached to this point, as, owing to weight, connexions, loose pedunculation, &c., the motion may not be very perceptible. As goitres are common and tumours of the vicinity likely to be mistaken for them are altogether rare, mistakes cannot often occur, nor are they likely to be of much moment considering that the identical treatment may be the best in each case. It is advisable, however, to distinguish bronchocele as soon as possible from simple inflammation, cancer, hydatids, and gaseous tumours. Thyroiditis comes on more or less suddenly and with the usual accompaniments of inflammation—viz., local heat, pain, tenderness, and concomitant fever. Its early subsidence soon abridges any doubts that may be entertained, but a chronic enlargement may result and pass for a genuine goitre. As to cancer,[25] it is not likely to be diagnosed until it reveals itself by pain or tendency to ulceration &c., or until its nature is proved at the necropsy. Hydatids[26] may be mistaken for cystic goitre, but are usually recognisable as lodgments in the gland as distinct from any general hypertrophy. An air tumour or emphysema may be developed in or about the thyroid body in connexion with a tracheal leakage or fistula. Diagnois is easy if it can be emptied by pressure and palpation. In any case it conveys a peculiar sensation to the touch. Tumours arising in other parts of the neck—such as enlarged glands, lipomata, &c.—do not simulate goitre and are not likely to be mistaken for it. Small bursal tumours attached to the larynx close to the thyroid gland, and rising in the act of swallowing, are easily distinguished from bronchocele. They rarely grow larger than a pigeon's egg.

Prognosis.—The usual course of a goitre is one of slow increase for an indefinite period, but after three or four years the growth of the tumour is, as a rule, almost imperceptible. Very hard goitres, whatever their age when first seen by the practitioner, may in general be safely predicted to have attained their utmost dimensions. Intercurrent symptoms of any moment are not to be apprehended, unless when actually present in an incipient stage. In Graves' disease the prognosis is more serious, as a certain proportion of these patients pass into a state of hopeless anæmia and

[14] Ibid.

[15] See Cheadle: St. George's Hospital Reports, 1869-71-78.

[16] A married lady aged thirty-eight presented herself with rather mild symptoms of Graves' disease. After about a twelvemonth she was well enough to leave off treatment. Five years after her first coming she returned with a sister aged fifty, also married, suffering in the same way. She herself appeared to be practically well. In the second case the action of the heart was very tumultuous; indeed, that was the only marked symptom. In both instances the goitre was small and the exophthalmia but slight. The elder sister was under observation for about eighteen months and expressed herself as being much better. The cardiac excitement had not appreciably abated. These sisters had lived apart in different districts for twelve or fifteen years.

[17] See Berry: THE LANCET, Jan. 25th, 1890.

[18] See Collin and Lebert: Recueil des Mémoires de Médecine, &c., troisième série, tome vi., 1861.

[19] Medical Times, June 15th, 1878.

[20] Loc. cit. Very contradictory opinions have been formed on the evidence of necropsies in this malady. See Withusen, Bibliothek far Läger, 1859 (trans. in Dublin Medical Press, 1859). Also Trousseau (Peter and Lanceraux), Clinique Médicale, &c., tome ii., 1868.

[21] Deutsche Klinik, 1863, No. 29.

[22] Heath's Dictionary of Surgery.

[23] Diagnostic et Traitement des Maladies du Cœur, p. 284, 1879.

[24] Erlanger Sitzungsbericht, 1879.

[25] See Wolfenden on Cancer of the Thyroid Gland. Medical Press and Circular, vol. ii, 1888.

[26] See Gurlt: Die Cystengeschwülste des Halses, p. 273. Berlin, 1856.

feebleness, and finally perish, usually when attacked by some trifling malady, such as febricula from taking cold &c. Nevertheless, a small percentage of cases seem to be of a temporary nature, pass through a period of exacerbation and decline, and ultimately undergo a practically spontaneous cure. Under these circumstances the goitre may almost disappear under the influence of a kind of cirrhosis. In all instances some dregs of the disease are left. Progressive exophthalmos is, in my opinion, the most unfavourable symptom. It is, indeed, surprising what an amount of cardiac tumult may exist for months, and even years, without giving any great discomfort to the sufferer, provided that in other respects the malady is not signally developed. The menopause is very unfavourable to victims of the disease, but the prospects are worst in the case of young women who have been in delicate health previously to being attacked.

Treatment.—1. In ordinary cases of goitre, such as I have included in the first class, excision of the tumour has been a favourite operation with German surgeons, notably Lücke, Billroth, and Kocher. During the recent Surgical Congress at Berlin the last-named presented his list of such operations completed to the number of 1000. Generally speaking, however, this means of radical cure has rather declined of late years owing to the discovery of myxœdema. This affection was independently noticed by Kocher in the form of "cachexia strumipriva," the term he applied to a train of symptoms observed by him to follow frequently on the total removal of a goitre. Tetany also very commonly occurs after complete excision. The difficulty is now met by leaving a small portion of the gland to fulfil the functions of the organ. Out of the 1000 cases of excision Kocher has put on record, only 12 per cent. of deaths resulted from the operation. A brief allusion will here suffice to the method of treatment employed extensively in India by a Captain Cunningham,[27] and said to have been successful in some scores of thousands of cases. I allude to applying an ointment of biniodide of mercury to the surface of the goitre and then causing the patient to keep the part exposed to the glare of the sun for an hour or several hours until blistering occurs; then the ointment may be reapplied and the case left alone for a twelvemonth, when, if the cure is not complete, the measure can be repeated. This treatment doubtless falls in easily with the habits of natives of the tropics, but it has failed here owing probably to its being less consonant with the routine or perhaps the solar opportunities of European life. We now come to the means of treating goitre introduced about a quarter of a century ago by Alfred Luton[28] of Rheims—viz., the injection of iodine into the substance of the tumour. This is undoubtedly the greatest advance ever made for the relief of bronchocele. Compared with excision the procedure is without risk either with respect to life or myxœdema, whilst in suitable cases the result is almost as certain as in the grave operation. It must be borne in mind, however, that very hard goitres will not yield to this treatment—the success of the injections is, in fact, precisely in an inverse ratio to the amount of induration. Thus, in some instances only a slight diminution of the swelling can be attained, but in a majority absorption will proceed until practically nothing is left of the tumour. I have found that in ordinary cases (when the goitre is, let us say, somewhat less in size than the average fist) an injection of about twenty minims of tincture of iodine once a week produces the maximum of reducive effect. Frequent injections are not, however, necessary to recovery, as the contractile result of a single operation does not die out altogether until a month or more has elapsed. Occasional injections may, therefore, be quite as successful as when they are carried out regularly once a week; but of course the time occupied will be proportionately longer. The slower treatment is advisable in the case of nervous and delicate patients, as the first effect of an injection is to produce some parenchymatous swelling and inflammation, which for two or three days is often accompanied by rather severe pain about the neck. Hence weakly persons soon begin to dread the little operation. In such cases it is well on each occasion to freeze the surface with ether spray at the point chosen for inserting the needle. How the injection acts is not quite certain; but it seems that the point of lodgment forms a focus from which the substance of the gland becomes devitalised in a diminishing degree throughout a considerable area. Consequently an active absorption of débris is set up, stimulated by the inflammation, the iodine, or both. The specific part played by the iodine is, however, a minor one, as good results can be obtained by the similar use of other fluids, such as solution of perchloride of iron, alcohol, dilute acetic acid, &c. As to the mode of procedure, the point of the needle should first be steadied on the spot selected for entry. Then by a quick movement the needle is driven straight in for half an inch, an inch, or more, according to the size of the goitre. Practising the insertion rapidly in this way the stab is so little felt that an ordinary patient will scarcely wince. When carelessly done the needle may carry the skin over the smooth surface of the goitre and enter at an acute angle, being itself bent or broken in the process. It is advisable that the needles for these injections should be stouter than those furnished for ordinary hypodermic use, in which it is only necessary to penetrate to the subcutaneous tissue. Unless the tumour is distinctly bi-lobed or extends across the whole front of the neck, it makes not much difference whether the injections are made always at the same spot or in various places. In the smaller goitres the needle must be directed from the point of entry towards the centre, and thus the site of lodgment will be always practically the same. The effect of the injections is, however, somewhat widespread, and even when the whole mass of the thyroid gland is involved the swelling may be observed to diminish on one side while the treatment is confined to the other side. As to very large goitres in which the enlargement approaches the size of the head or thereabouts, I have only seen one such case. In that the injections were unsuccessful, although the tumour was rather soft and appeared to consist of a number of fibro-cysts, each being somewhat larger than a walnut. Such developments are undoubtedly very rare in sporadic instances. The treatment of bronchocele by the internal administration of drugs has been very extensively attempted, but the results are only occasionally satisfactory. Iodide of potassium has of course been generally the sheet-anchor, but hydriodic acid[29] and hydrofluoric acid[30] have, for a time at least, been strongly advocated. At the German Congress above-mentioned Kocher spoke very highly of thyroid gland and phosphate of potassium used conjointly, and such a recommendation coming from a surgeon so habituated to the use of the knife in these cases should certainly carry great weight. 2. In cystic goitres the indications for treatment are simple and after the old-established measures adopted for the radical cure of hydrocele—tap the cyst and inject some fluid capable of setting up an inflammatory process by which the secreting membrane lining the cavity may be destroyed. Thus the tumour is entered about its lower third by a medium-sized trocar and cannula, care being taken to avoid any vein which may appear near the surface. When the contents are evacuated two or three drachms of solution of perchloride of iron (two drachms to an ounce) are injected through the cannula, which is stopped with a plug and allowed to remain in, its retention being ensured by some suitable fixing. The discharge-pipe of the syringe used should be bent at an obtuse angle, so that the body of the syringe is held somewhat upright when injecting. This form was adopted by Mackenzie after he had had a death from injecting air into a vein, in order to ensure that no bubble of air should remain in the liquid injected. After two or three days the plug is removed, when, in the most favourable cases, the discharge will be found scanty, mixed with some pus, and perhaps a little blood. The plug is reinserted and removed daily or on alternate days for two or three weeks until the discharge diminishes to a small amount of purulent liquid. Finally the cannula is withdrawn and the opening is afterwards kept open by any simple device, such as keeping a piece of thin wax bougie strapped into it with plaster, until the discharge ceases and the cyst is evidently obliterated. Sometimes it happens that the goitre refills very rapidly and there is little evidence of the interior irritation which should result from the injection. The latter must then be repeated. In the most obstinate cases Woakes's[31] plan of passing a probe or "acid-carrier" dipped in saturated solution of chromic acid into the cyst may be tried. It must be impressed on the mind of any practitioner without experience of this treatment that the operation,

[27] See Mouat, Indian Annals of Medical Science, April, 1857; also S. Mill Frodsham, Bulletin Général de Thérapeutique, tome lix., 1860.
[28] Archives Générales de Médecine, 1867. Interstitial injections with various fluids had been tried by Velpeau and others before that date, but without method and perseverance.

[29] American Dictionary of the Medical Sciences: article Goitre.
[30] Woakes, THE LANCET, March 19th, 1881.
[31] THE LANCET, June 21st, 1890.

simple as it is, causes a great deal of constitutional disturbance. In women not particularly robust the pulse will often rise to 120 or more immediately after the tapping, and several weeks will often elapse before the vascular fervescence at length gradually subsides. Deaths have even been reported, though none happily have come under my own cognisance. Females, however, who are in any way fundamentally delicate often remain in a state of weak health for many months. I have never heard of any drugs being vaunted for the cure of cystic goitre, but electrolysis has been tried, as it has in other goitres, with, however, more promising results. According to Dickson[32] of Toronto the best method is to empty the cyst by means of an aspirating needle isolated to within an inch of its point. Then refill the cavity with a solution of common salt and connect the needle with the negative pole of the battery, the positive electrode being applied between the shoulders. A current of thirty milliampères may be employed for fifteen or twenty minutes, after which the sac is to be emptied and the opening sealed. The repetition of this procedure two or three times at short intervals may effect a cure. It may be mentioned that operating surgeons sometimes enucleate the cyst in this class of goitres. 3. Until recent years exophthalmic goitre has been regarded as entirely outside the domain of surgery. The patient, has, therefore, been subjected only to the influence of such drugs as seemed likely to combat the symptoms, especially bromides, digitalis, strophanthus, &c., with perhaps a surface application of electricity to the tumour or to the cervical sympathetic after the manner of Eulenburg.[33] Iodine has not been relied on in this affection as it has in ordinary goitres, although in one case recounted by Trousseau[34] it appeared to have a specific action. Both thyroid and thymus gland, antagonistic substances as it is thought, have recently been administered, but the evidence does not yet enable us to decide as to their value. The persevering use of galvanism to the goitre sometimes produces a diminution of size, but the value of electricity is most marked when the negative electrode is applied to the course of the sympathetic nerve in the neck.[35] An almost immediate reduction of the pulse to 80 or 90 often follows with a general sense of relief to the patient, which may last for two or three days. When there is a tendency to spontaneous cure, or the malady is stationary, such measures are palliative in a very high degree. As early as 1873 Watson[36] of Edinburgh had excised the goitre in three cases with encouraging results, but he was practically without imitators. Now, however, owing to the different views spreading as to the nature of Graves' disease radical measures are steadily coming into vogue. Thus, at the recent German Surgical Congress Mickulicz of Breslau brought forward a number of cases treated by partial excision and also some by ligature of the afferent arteries. Unfortunately, at present the wave of psycho-therapeutics has risen to such a height that a considerable number of practitioners are ready to attribute every successful result to hypnotic suggestion. It may be said, indeed, that in medicine now measures

> "Of great pith and moment,
> With this regard their currents turn awry
> And lose the name of action."

I have myself been accustomed for some years to inject these cases as in ordinary goitres, though at much longer intervals than when there are no signs of neurosis. Not that I consider there is any special danger to be apprehended from the injection in such patients, but merely that the subjects being as a rule in a very nervous state the mere prick of the needle may drive them into hysterics, make a scene, &c., at the time, and even after some days the practitioner may hear that the patient is still displaying unusual restlessness in the domestic circle. After the injection has been done two or three times, however, this condition of things to a great extent passes off, and the sufferer submits with tolerable equanimity to the operation. It is just in this class of cases that freezing the surface becomes a valuable preparatory measure, and it is highly advisable to have recourse to it. I have little doubt but that in the future the cardinal rule for treatment of exophthalmic goitre will be to first get rid of the bronchocele. Electrolysis has been tried in exophthalmic goitre, but I have met with no laudatory report of its action. I may here append some statistical information relating to 287 instances of all forms of goitre which have passed through my own hands:—

—	Fibrous.[37]	Cystic.	Mixed.	Exophthalmic.	Totals.	Results. Cured.	Relieved.	Negative.[38]
Males—								
15–25	1	—	—	2	3	—	—	—
25–50	7	1	3	—	11	—	—	—
Females—								
15–25	57	—	7	51	115	—	—	—
25–50	82	18	23	35	158	—	—	—
Totals ...	147	19	33	88	287	—	—	—
Treatment—								
Injection	135	1	30	17	183	111	39	33
Tapping	—	15	—	—	15	9	2	4
Drugs and external application	12	3	3	71	89	11	40	38
Totals ...	147	19	33	88	287	131	81	75

Finsbury-square, E.C.

[32] Canadian Practitioner, Aug. 16th, 1892.
[33] Ziemssen's Cyclopædia, vol. xiv.
[34] Loc. cit.
[35] For elaborate observations on this point see Cardew: The Practical Electro-therapeutics of Goitre.—THE LANCET, July 4th, 1891.
[36] Edinburgh Medical Journal, Sept., 1873. See also the account of a case cured by a seton.—Macnaughton Jones, Brit. Med. Jour., Dec. 19th, 1874.

[37] Here are included all goitres not obviously cystic and without apparent neurosis.
[38] These are chiefly patients lost to sight before the treatment had a fair trial.

THE VARIOUS METHODS OF OPERATING ON THE MASTOID PROCESS AND THE INDICATIONS FOR THE SAME.[1]

BY ADOLPH BRONNER, M.D.
SURGEON TO THE BRADFORD EYE AND EAR HOSPITAL, AND LARYNGOLOGIST TO THE BRADFORD INFIRMARY.

DISEASES of the mastoid process due to affections of the middle ear are very common, but only a small number of cases are operated on; and even when an operation is performed the anatomy of the parts and the technique of the operation are often so imperfectly understood that the results are not as good as they might be. Every surgeon sees large numbers of cases with extensive disease of the mastoid process in which no operation has been performed until the disease has spread to the brain, or where the operation has been restricted to Wilde's incision or to the use of a gimlet or gouge. In operating we have three important cavities to deal with: the middle ear, the attic, and the mastoid antrum or cells. The attic is separated from the middle ear by fibrous bands and ligaments only, and the attic and mastoid antrum are practically directly continuous. The dangers of operating are not very great if we are thoroughly acquainted with the anatomy and pathology of the parts and have frequently performed the operation on the dead body. They are naturally extremely great and grave, if we restrict our methods of operating to roughly and rudely scraping out the middle ear or perforating the mastoid process with a gimlet or gouge. Some of the dangers are: (1) lesion of the facial nerve or (2) of the external semicircular canal; (3) opening the sigmoid fossa; (4) wounding the lateral sinus or (5) the internal carotid artery; and (6) perforating the tegmen tympani. In some cases the positions of these parts vary to a considerable extent, and we have therefore to operate with great caution. Frequently there is only a very small mastoid antrum and few cells, or we only find a few cells on a level with the attic and above the lateral sinus. This is of great practical importance. The indications for operating, according to Schwartze, are:—1. Acute primary or secondary inflammation of the mastoid process, if the symptoms under treatment do not improve in a few days. It is, of course, often difficult to know exactly

[1] Abstract of a paper read before the Leeds and West Riding Medico-Chirurgical Society, March, 1895.

when to operate, but it certainly is safer to err on the right side and operate too soon rather than too late. If there is redness and swelling in the upper and posterior wall of the external meatus, or if the apex of the mastoid process is swollen and painful, we should operate at once. 2. Chronic inflammation of the mastoid process with recurrent attacks of swelling. 3. Fistula over or near the mastoid process. 4. Chronic inflammation of the middle ear without apparent affection of the mastoid process if there are symptoms of retention of pus (pain, fever, &c.) or if there is a cholesteatoma. 5. Persistent neuralgia of the mastoid process. 6. Chronic otorrhœa without symptoms of swelling of the mastoid process or of retention of pus, as soon as we think that the inflammation extends beyond the middle ear. In ordinary practice all cases of otorrhœa would be included which, under proper treatment, do not heal in from six to nine months. In cases where there are slight cerebral symptoms it is always advisable to first operate on the mastoid process before opening the brain cavity. Extensive disease of the bone can give rise to such symptoms as slight optic neuritis, strabismus with diplopia, convulsions, coma, &c. Whether there is not slight meningitis present, which subsides after the mastoid operation, it is difficult to say, but certainly in some cases these well-marked cerebral symptoms disappear after the ordinary mastoid operation.

Schwartze in 1873 was the first to publish a series of cases of operations on the mastoid process, and he described a method of operating which was universally practised from 1873 to 1889.[2] The idea was to open up the mastoid antrum from behind the ear and establish a free communication and drainage between the antrum, the middle ear, and the external meatus. Schwartze strongly recommended the use of the chisel and hammer, and these are now in universal use. The operation as described by Schwartze is well known and can be found in all text-books of otology. The wound and cavity are plugged with iodoform gauze for several weeks and a lead nail or wire is then introduced into the fistula behind the ear and worn as long as possible—sometimes for one or two years. Macewen does not like the chisel and uses a rotatory burr for opening up the antrum. He thinks that with the chisel we may break down or crack any thin layer of bone between the diseased parts and the sigmoid groove or the middle cerebral fossa, or that we may loosen septic thrombi of the small vessels. In operating according to Schwartze's method it was soon found that, although the majority of cases did extremely well, in a certain number the bone did not heal for years in spite of careful after-treatment. Experience proved that the majority of these cases were those in which the attic and surrounding bone had been diseased. In 1889 Küstner[3] recommended that in all cases in which the middle ear is extensively diseased we should not be content with Schwartze's operation, but should also remove the whole of the posterior wall of the osseous external meatus. He passes a drainage-tube through the external meatus and antrum. Bergmann[4] suggests that the posterior and also the upper wall of the external meatus should be removed. He thinks that we should be very careful in syringing, as we may thus readily force pus into healthy tissues or cavities. Lucae[5] makes similar suggestions. Zaufal[6] uses Luer's bone forceps for a similar operation. In 1892 Stacke[7] suggested several important alterations in Schwartze's operation. He removes the outer and lower wall of the attic, the posterior and upper wall of the osseous external meatus, and the outer and lower wall of the mastoid antrum. One large cavity is thus formed out of the external meatus, the middle ear, attic, and antrum. These modifications are of such great practical importance that I may perhaps describe the method of operating in a few words. A long incision is made behind the ear, the cutaneous external meatus is cut through above the drumhead, and the whole is drawn well forward. We thus get a clear view of the diseased parts. The remains of the drumhead and the malleus are removed, and a bent probe is passed into the attic. The outer and lower wall of the attic is then chiselled away. The middle ear and attic now form one cavity. A bent chisel is used. The probe is then passed into the aditus ad antrum, and the upper and outer wall of the external meatus and the outer wall of the antrum are removed with the chisel. We now have one large cavity formed by the external meatus, middle ear, attic, and antrum. The ear is then replaced and the wound sewn together. Schwartze now also performs a similar operation, but he first opens the antrum and then works forward into the attic and middle ear. He does not cut through the whole of the cutaneous external meatus, but only through the posterior half. In the last few years most excellent work has been done in this country by Ballance, Arbuthnot Lane, Urban Pritchard, and especially by Macewen and Victor Horsley. They have, however, chiefly dealt with the methods of operating on such cases in which cerebral complications have developed. Macewen and Horsley have made most valuable suggestions for the after-treatment of mastoid operations. In severe cases they prolong the ordinary incision behind the ear forwards round the top of the auricle, and thus make a large gaping wound which can be easily overlooked and dressed. The wound is not stitched at all, but is allowed to fill up by granulations from below. By this method a recurrence of the disease is rendered practically impossible. I hope that in the interests of otology, Horsley and Macewen will publish their experiences in this method of after-treatment. It seems to me to be of the greatest value, and we shall in future be better able to effect a radical cure and prevent any fresh outbreak of the disease. I have for some time drawn attention to the fact that it is a great and fatal mistake to sew up the greater part of the wound, and that we should leave a large opening so that we can watch the diseased parts. In bad cases I am now adopting Horsley's method, and make a large incision round the ear and use no stitches. It seems to me to be a great and distinct advance in mastoid operations.

In determining which method of operation we should adopt in the various cases it is of course essential that we are thoroughly acquainted with the anatomy and pathology of this region, so that we may be able to form an opinion as to which parts are affected and how far the disease has spread. In acute cases of mastoid disease the ordinary Schwartze's operation suffices. When there is neuralgia of the mastoid process we make Wilde's incision and then remove part of the cortex of the process. In cases of chronic otorrhœa, when the disease is confined chiefly to the mastoid process, Schwartze's operation gives excellent results. When there are no symptoms of mastoid disease it is best to perform the first part of Stacke's operation. We can then thoroughly explore the middle ear and attic. In most cases we will find that the latter is diseased. We then remove the outer and lower wall of the attic, scrape away the diseased bone, and see if any pus or granulations come from the mastoid cells or antrum. There are frequently some mastoid cells on a level with the attic, which are generally overlooked. In some cases the antrum is extremely small. If we think that the antrum is diseased we finish Stacke's operation. In many cases of chronic otorrhœa the disease is chiefly confined to the attic and to a few surrounding cells. In cases of perforation of Shrapnell's membrane, or disease of the ossicula, we should at once perform the first part of Stacke's operation. Some years ago numerous cases were recorded, chiefly by American writers, in which removal of the ossicula cured the disease of the attic. Milligan[8] has lately also published some cases. My own experience, and also that of others,[9] seems to prove that removal of the ossicula may stop the suppuration for a short time, but that in nearly all cases the disease breaks out again. I therefore now invariably strongly recommend Stacke's operation at once, or at least the first part of it. In cases of extensive cholesteatoma we should perform the whole of Stacke's operation and form one large cavity, which can be carefully watched and any recurrence at once seen. In severe cases it is best to leave a large permanent opening behind the ear.

The facts to which I should like to draw particular attention in this short paper are: (1) that we should not undertake operations on the mastoid process unless we are thoroughly acquainted with the anatomy and pathology of the parts and unless we have frequently operated on the dead body; (2) that in all cases of chronic purulent otitis media which do not yield to the ordinary methods of treatment the attic and mastoid antrum should be carefully examined and, if necessary, operated on; (3) that the use of

[2] Archiv für Ohrenheilkunde, Band vii., p. 157, and Band xi., p. 21.
[3] Deutsche Medicinische Wochenschrift, Nos. 10 to 13.
[4] Die Chirurgische Behandlung der Gehirnkrankheiten, 1889.
[5] Archiv für Ohrenheilkunde, Band xxxi., p. 225.
[6] Ibid., Band xxx., p. 291.
[7] Berliner Klinische Wochenschrift, No. 44, and Archiv für Ohrenheilkunde, Band xxxi., p. 213.
[8] Brit. Med. Jour., Nov. 24th, 1894.
[9] McBride, Ibid.

the gimlet or gouge alone is a dangerous and incomplete method of operating; and (4) that in the after-treatment we should not stitch up the wound, but leave a large opening, so that we can carefully watch and treat the diseased parts, and that in severe cases we should prolong the incision well round the ear, plug the wound with gauze, and allow it to heal up from below by granulation.

Bradford, Yorks.

ON A CASE OF MEDIAN CERVICAL FISTULA.

BY J. BLAND SUTTON, F.R.C.S. ENG.,
ASSISTANT SURGEON, MIDDLESEX HOSPITAL.

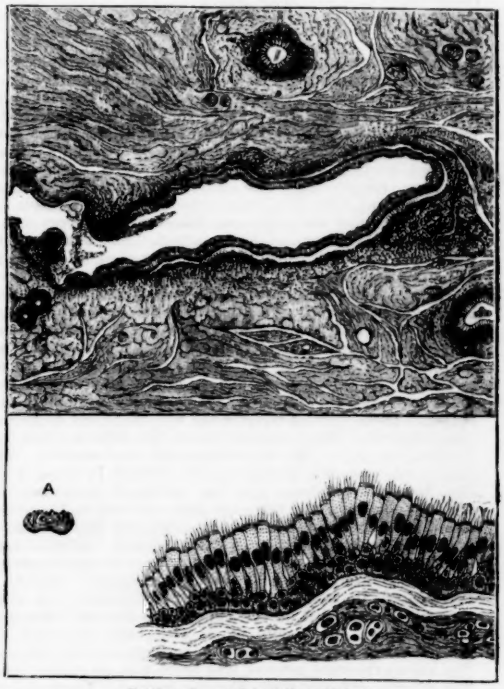
SOME months ago Sir Hugh Beevor kindly placed under my care a young adult with a "median cervical fistula." In the lower third of the neck, as represented in Fig. 1, the skin presented what looked like a depressed and puckered scar. At the upper part of this bay or recess there was a rounded opening from which clear mucus exuded. An ordinary probe introduced into this hole easily passed upwards in the middle line directly beneath the skin to stop at the middle of the lower border of the basi-hyal. It was

FIG. 1.

Median cervical fistula.

evident that I had before me an example of a persistent thyroid duct. The patient stated that the opening in the neck existed as long as he could remember, but his parents told him that it appeared when he was about three years old. Ordinarily the fistula caused no inconvenience, but during the past two years it seemed subject to catarrh, and the excessive flow of mucus caused him so much inconvenience that he was anxious for relief. The man was admitted into the hospital, and I dissected out the duct. It passed vertically upwards beneath the deep fascia of the neck to the basi-hyal, and in the course of the dissection it was found that near its lower end the duct bifurcated, one arm ending blindly, the other opening on to the skin at the margin of the bay as already described. The upper end of the duct passed behind the basi-hyal, finally becoming incorporated with the thyro-hyoid membrane. I succeeded in removing the duct entire, guided by a probe introduced into it at the beginning of the operation. The incision in the deep fascia was secured by interrupted sutures of cat-gut and the skin brought together by means of fine silk. As no previous attempt had been made to cure this fistula I had the duct carefully hardened and sectioned. Its lumen was lined with typical columnar ciliated epithelium; goblet cells were present. The tissue forming the walls of the duct resembled atrophied thyroid tissue; here and there, as shown in Fig. 2, isolated acini lined with epithelium were detected. This case illustrates very well the chief features of the thyroid segment of the thyro-glossal duct: (1) Its median position and relation to the basi-hyal; and (2) The appearance of the fistula subsequently to birth. It thus stands in striking contrast to branchial fistulæ, which are (1) always lateral and in close relation to the anterior border of the sterno-mastoid muscle; and (2) are always congenital. I have had many opportunities of studying and operating upon these ducts and fistulæ, but this is the first occasion on which I have been able to secure a thyroid duct

FIG. 2.



Section of a persistent thyroid duct.
A represents the duct of natural size. The lowest drawing shows the epithelium more highly magnified.

which had not been damaged by previous attempts at cure, thus the epithelium was in good condition. It is a noteworthy fact that the epithelium of the thyroid duct and persistent branchial fistulæ is identical. This example demonstrates what I have often emphasised—namely, the thyroid duct is a real and tangible structure large enough in adults and even in children to accommodate a probe: it is not a minute passage existing only in the embryo and requiring elaborate histological methods and high powers of the microscope to render it visible.

Queen Anne-street, W.

SOUTH-WEST LONDON MEDICAL SOCIETY.—A meeting of this society will be held at 235, Lavender-hill, on Wednesday, Nov. 13th, at 8 P.M. Dr. Chas. W. Chapman will read a paper on Heart Disease in the Young, its Management and Treatment, and proposes, if possible, to show patients illustrating his paper.

IN MEMORIAM.—The honorary medical staff of the Sydney Hospital, New South Wales, intend to erect a tablet in the hospital chapel, in recognition of the great services he rendered to the profession, as a memorial to the late Mr. Louis R. Huxtable, M.B., C.M. Edin., who died at his residence in College-street, Hyde Park, Sydney, on July 30th last.

NOTES OF A CASE OF PRIMARY THROMBOSIS OF THE SUPERIOR LONGITUDINAL SINUS IN AN ADULT, FOLLOWED BY RECOVERY.

BY E. HUGH SNELL, M.D., B.SC. LOND., D.P.H. CAMB.,
LONDON COUNTY COUNCIL MEDICAL OFFICER TO THE BLACKWALL TUNNEL.

THE occurrence of primary thrombosis in the superior longitudinal sinus in an adult is, I believe, comparatively infrequent; also the symptoms presented are so rarely characteristic that a diagnosis during life appears to be eldom made and not often possible. The following case is probably, therefore, of sufficient interest to atone for its publication.

A young woman, aged twenty-six, came under my care at the Paddington Infirmary on Oct. 27th, 1893, complaining of severe headache together with loss of power in the right arm and right leg; she was unable to walk or stand. The previous history was as follows. Until three weeks previously she had always been in fairly good health; she had had one or two "fits" before menstruation commenced, but none since. She was usually rosy-cheeked, bright, and intelligent. On Oct. 8th she complained of a headache and of not feeling well; this was followed by a severe attack of diarrhœa accompanied by vomiting. She continued to work until the 11th, when she was compelled to remain in bed. No cause for the diarrhœa was discovered. A week afterwards, while still in bed, she complained of more frequent and severe headache situated at the back of the head. The diarrhœa and vomiting still continued; the vomiting was said to have come on after taking food. There was no hæmatemesis. Then, a few days before admission as an in-patient, she complained of weakness in the legs and inability to stand. Mentally she became very dull and stupid. There were no convulsions and there was no loss of consciousness. When seen by me on Oct. 27th her face was flushed, the rest of the body being pale and anæmic. The tongue was pale and tremulous, and covered by some small, dry, brownish patches. She lay in bed in an apparently helpless condition and was very slow and dull in answering questions. She held the right arm rigid and could not move it; the arm could be forcibly flexed without pain to the patient, the only resisting force being muscular. When the arm was held up by a second person it commenced to tremble violently, remaining at the same time rigidly extended at the elbow; the tremors were large and irregular. She could stand with help, but could not move the legs forward; there was some paresis of both legs. The knee-jerks were normal, and there was no ankle-clonus. The plantar reflexes were likewise normal. There was no anæsthesia. It was noticed that the right calf was larger than the left. There was no disease of the heart and lungs. The pulse-rate was 108 per minute, small and irregular. Ophthalmoscopic examination showed that the right fundus oculi was normal, except that the arteries were somewhat tortuous; on the left side the arteries were tortuous and the edge of the disc was slightly blurred; the appearances suggested commencing optic neuritis. The urine was of sp. gr. 1022, acid, contained a faint trace of albumin, with a deposit of urates. At 6.30 P.M. on Oct. 27th she called out to the sister of the ward that she was going to have a fit and said, "Hold me." She then gave a short cry, becoming livid in the face and then unconscious; there was no foaming at the mouth. Convulsive movements commenced in the right arm and right leg, the mouth was drawn to the left side, the eyes were fixed, and the conjunctival reflex was absent; the convulsive movements then affected slightly the left arm and left leg. Consciousness returned in two or three minutes, the patient sobbing. She afterwards explained that she felt that a fit was coming on because of a choking sensation in the throat; she had had no fits before except those mentioned in the previous history. At 6.10 A.M. on the 28th there was another fit of a similar character lasting two or three minutes; it was doubtful when the convulsions began. She knew that a fit was coming on and called out; but it was not attended by screaming. On the 30th an improvement in the mental condition was observed; she could move slightly both the right arm and right leg, but could not walk without assistance. The right grasp was feeble, the left very good. The tongue was still dry, with brown patches. The pulse was 108 and irregular. She was very anæmic and had been constipated since her admission. Ophthalmoscopic examination showed slight, but distinctly commencing, optic neuritis in both eyes. Iron, quinine, and arsenic were administered, as also stimulants and a nourishing diet. On the 31st the mental improvement was still more marked. Œdema was looked for over the scalp and forehead, but none was found. There was no cerebral tenderness. The face was still slightly flushed; the tongue was not so dry and brown. The disproportion between the calves noticed on her admission was still more marked; the circumference of the right calf was 13¼ in., and that of the left 12 in. Deep tenderness existed in the right calf, this not having previously been noted; but there was no tenderness in the popliteal regions or in the femoral veins. The pain in the head was always worse at night time and sleep was very much disturbed. The right grasp, measured by the dynamometer, was 25 and the left 37½. On Nov. 1st the grasps were: right, 23; left, 57. On the 2nd the pain in the head was better, and she passed a better night; the tongue was clean. On the 3rd the grasps were: right, 25; left, 50. During the night of the 4th an erythematous rash appeared on both arms, which caused much irritation; its distribution was confined to the external surface of the arms and the posterior surface of the forearms. It was more marked on the left side and disappeared on pressure. By the 6th the rash had disappeared. On the 8th the optic neuritis in both eyes was found to have much increased; the edges of the discs could not be defined. On the 11th both grasps were 48. On the 16th the right calf measured 12½ in. and the left 12 in. There was no tenderness of the former. The right knee-jerk was less marked than the left. She no longer complained of headache. On the 24th no recurrence of the pain in the head was found to have taken place. The knee-jerks were equal and normal. She could walk without limping, and there was no obvious weakness in either leg. On the 30th ophthalmoscopic examination showed that the neuritis in the right eye had improved, and the edge of the disc could be defined; the improvement in the left eye was not so marked. On Dec. 2nd the right grasp was 60 and the left 70. On the 7th the right calf remained half an inch larger than the left. The optic neuritis had still further diminished; the vision, which had previously been impaired, was improving; there was no weakness of the arms or legs, and she was intellectually very bright. She left at her own request on the 8th, and she did not again come under my observation, but I heard a month later that she felt quite well, and that her vision was unimpaired. The temperature was never above 100° F.

Remarks.—The history of diarrhœa continuing for a fortnight; the subsequent paralysis of the right arm and right leg, with some paresis of the left leg; the fits with convulsions commencing on the paralysed side; the impairment of the intellect; the tremulous tongue; the headache; the optic neuritis; the rigidity and large tremors of the right arm—all these suggested to me that the case was one of so-called "primary" or "marantic" thrombosis of the superior longitudinal sinus blocking the veins from the left hemisphere more than those from the right, and led me to form an unfavourable prognosis, but at the same time induced me to try what result tonics, stimulants, and a good diet might effect. In spite of the absence of any œdema of the scalp or forehead, the subsequently noticed signs of thrombosis in the deep veins of the right leg appeared to support the diagnosis, and the gradual improvement and ultimate recovery seemed to exclude any other alternative. It is possible that the extreme anæmia may have assisted in producing the optic neuritis; but, on the other hand, it may have been wholly due to the thrombosis in the sinus. A perusal of the monograph on Thrombosis of the Cerebral Sinuses by Professor Dusch[1] shows that of 11 cases of distinctly "primary" thrombosis quoted by him 7 occurred in children and aged people, and 4 between the ages of twenty and sixty; 3 only of these latter arose from acute conditions, and were attributed (by Cruveilhier and Schmucker, who originally recorded them) in two cases to too copious venesection and in the third to diarrhœa. It appears to be well established that among young children diarrhœa is by far the most common cause. A necropsy was made in all the cases quoted by Professor Dusch. That the

[1] Translations of the New Sydenham Society. 1861.

condition is regarded as especially fatal may be due to the scarcity of those cases in which a diagnosis is possible. The only instance of recovery from such a condition that I have been able to find is one recorded by Voorman and quoted by Dr. Gowers;[2] in this case the patient was a child aged five months, and the recovery was incomplete.

East Greenwich, S.E.

SPASMUS NUTANS.

BY GILBERT A. BANNATYNE, M.D. GLASG.,
HONORARY PHYSICIAN, ROYAL MINERAL WATER HOSPITAL, BATH.

SPASMUS NUTANS, or head-nodding, while comparatively rare in children, is almost unknown in adults. Except the cases mentioned by Dr. McGillivray of Dundee,[1] I have failed to find any mention of it in the literature at my command. Possibly, therefore, the report of such a unique condition may be of interest to some of the readers of THE LANCET. For details of the disease in children I would refer them to Henoch,[2] who was the first to point out the features of the disorder, and to the papers of Dr. Stephen Mackenzie,[3] Dr. Gee,[4] Dr. Hadden,[5] and Dr. G. Dickson.[6]

A man aged forty-three was admitted to the Bath Royal Mineral Water Hospital on Aug. 30th, 1895, suffering from pains in the back and right hip, with lateral spasmodic movements of the head and eyes. According to the report furnished by his medical attendant the patient had suffered from rheumatism and sciatica from about the middle of May and had been steadily getting worse up to the time of admission. He also stated that the patient had suffered from nystagmus from birth. On admission the patient stated that fifteen years previously he had what he thinks was an acute attack of rheumatism; since then he had been free from it until the onset of his present illness. There is no history of syphilis, either inherited or acquired; the family history is good. He complained of pain about the right hip and down the course of the right sciatic nerve, and to a less extent over the lower lumbar spines. His complexion is unusually fair, but he is not an albino. On examining the joints no changes were detected, the movement being free, and on passive movement there was no pain. There was no pain or tenderness down the course of the sciatic nerve, and there was no wasting or other sign of nerve degeneration. Sensation was normal, and the reflexes were active. Over the lumbar spines some slight tenderness was obtained on deep palpation. At the same time, although not complained of, it was noticed that he suffered from horizontal nystagmus of both eyes, with internal strabismus of the right eye and lateral oscillation of the head. On inquiry these symptoms would appear to have existed as long as he could remember and, he believed, from birth or soon after. No cause could be given for its onset, and as far as he knew he never was seen by a medical man. He stated that it had not altered much in degree or character, and had never been sufficient to interfere with his work. His schooling seemed to have been of the scantiest. At times he was troubled with a feeling of weight and heaviness in the head, principally on the right side. For years he had been subject to sudden attacks of partial loss of consciousness. These were unaccompanied by any premonition and usually made him either fall backwards or at least clutch at something to prevent him from falling. He never became quite unconscious and had never hurt himself. The fits at their worst occurred as often as twice or thrice a week. They became worst during the five years from 1888 to 1893, after which they gradually became fewer and have now entirely ceased. The other symptoms have altered little. The movements of both head and eyes became worse when he was excited or when his attention was drawn to them. They ceased during sleep and to a certain extent when lying down—that is to say, whilst in the recumbent position the movements of the head ceased entirely, whilst those of the eyes became slower and not so frequent. On closer examination it was seen that the first movement of both eyes and head was to the left, and the divergence was certainly greater to that side of the middle line than to the right. The movement was entirely of a horizontal nature. The movements of the head and of the eyes did not correspond with each other either in number or in rhythm; the eyes oscillated from 80 to 100 times per minute, whereas the head only did so from 20 to 30 times, or it might be even less if his attention was taken up by other things. He had little control over either movement, the mere fact of trying to control them at times seeming to bring them more into evidence. This became so marked that now and then twitching of the left facial muscles occurred. The strabismus also at those times became more marked. Mr. W. M. Beaumont kindly examined the patient's eyes for me, and he reports that there is "well-marked horizontal nystagmus of both eyes, exaggerated if the eyes are deviated either to the right or left. There are also frequent lateral or slightly rotatory movements of the head not synchronous with the nystagmus and somewhat irregular. He appears to be able to control the movements to a slight extent, and they cease when he lies down. The nystagmus does not cease when he lies down. Interior of the eyes by ophthalmoscopic examination: There is a delicate veil-like opacity of the vitreous, with fine particles floating about. The choroidal vessels are seen very clearly (he is an extremely fair man, with light-yellow hair, but not albinic), and in each eye there are more than twenty dioptres of myopia, with posterior staphyloma. His vision cannot be improved beyond $\frac{6}{18}$. The bad vision and nystagmus are said to be congenital." Treatment consisted in a course of the mineral waters, both externally and internally, with iodide of potassium. On Oct. 10th the patient expressed himself as feeling quite well, being free from all pain and also of the feeling of weight in the head. He stated that he was as well as he had ever been, and, being anxious to return to work, he was discharged. Little or no change occurred during treatment in the head and eye symptoms, and one may safely say that in all probability they will remain for the rest of his life.

Remarks.—Looking at the case as a whole it may, I think, be classed with those to which the somewhat misleading term of "spasmus nutans" has been given. In saying that the name is misleading I mean in so far as it implies that the head is nodded, for in a certain proportion of cases the motion is not from back to front, but from side to side, and, therefore, strictly the term should not be applied. It has been given, however, and has come to be associated with a sufficiently well-marked series of symptoms, and it would be a pity to add confusion by applying a new term to those cases in which the movements are lateral, as has been suggested. The question of diagnosis must remain for the present undecided. I am not inclined to believe that this is only one of the many forms in which epilepsy is manifested, but rather think that it is a disease *per se*. It must be borne in mind that head movements with nystagmus are fairly common in grave nerve disorders merely as symptoms. Whether, when they occur, as in the above case, unaccompanied by other symptoms, they are to be regarded as constituting a regular disorder or only as a group of symptoms having a deeper significance must for the present be left alone. The points of most interest in the symptoms are their persistence, the lateral character of the movements, the attacks of *petit mal*, the facial twitching and strabismus, the fair complexion, and the pain and tenderness over the spine. The outstanding feature is undoubtedly the persistence of the symptoms. In almost all the cases hitherto reported the disease has proved to be transitory, seldom lasting more than a few weeks and ceasing, as a rule, when some reflex exciting cause has been removed. With the exception of three cases described by Henoch[7] and nine mentioned by Dr. McGillivray,[8] all the other cases hitherto reported have been under two years of age and mostly under one at the beginning of the attack. As a rule, it has lasted for from a few days to several months, but with the exception of the cases mentioned never longer. Henoch's three cases were seen respectively at the ages of nine, ten, and twelve. In only one was the onset fixed, which was a year and a half before coming under observation; the other two cases were accompanied by other symptoms pointing to central nerve disease, and therefore cannot be regarded as pure cases. The cases of Dr. McGillivray are of much interest. Eight occurred in one family in four generations, thus establishing a hereditary tendency in the

[1] Diseases of the Nervous System, vol. ii., p. 420. 1888.
[2] Ophthalmic Review, August, 1895.
[3] Diseases of Children. Translations of the Sydenham Society.
[3] THE LANCET, May 1st, 1886.
[4] St. Bartholomew's Hospital Reports, vol. xxii., 1886.
[5] THE LANCET, June 14th, 21st, and 28th, 1890.
[6] THE LANCET, Oct. 5th, 1895.

[7] Loc. cit., vol. i., p. 195.
[8] Loc. t.

complaint. It was apparently transmitted by the female side, skipping one or more generations, more often than by the male. The disease was congenital, and in all cases persisted throughout life. The other case occurred associated with three others in which lateral nystagmus only was developed, and it would look as if the nystagmus were an early or not so fully developed condition. In Dr. McGillivray's cases the sight was usually affected. In the case under consideration it is not only seen in an adult, but from the history given it cannot be doubted that it came on early in life and had since persisted without intermittence. It was likewise unaccompanied by any further symptom pointing to other and more grave nervous trouble. Is it to be classed with those of Dr. McGillivray in so far as to call it congenital (no direct evidence exists that it was so), or is it to be classed with those of Henoch and others? There is, on the one hand, no history of heredity, and, on the other, it is a mystery why it should have persisted. Henoch and Dr. Hadden are of opinion that it arises from reflex impulses set up by disordered dentition or other slight irritation in the earlier months of childhood. This patient in all other respects is a strong, healthy man, and has hitherto been quite capable of carrying on his somewhat arduous occupation. The family history affords no clue. He is married and has healthy children, and there is no history of syphilis, either inherited or acquired, and no epilepsy. It must be presumed that it originated in some hitherto unexplained way, but probably in the manner suggested by Henoch. Next in order is the direction of the movements. In the large proportion of cases hitherto reported these have been of a nodding character; in some, however, this character has been modified by a more or less lateral movement, producing a rotatory spasm, and in a smaller proportion there has been a pure lateral movement. The eye movements as a rule correspond in direction with that of the head. In this case the motion was undeniably first to the left, showing that the spasm commenced in the left muscles; but one could not determine whether the corresponding spasm on the right side was only an induced and subsidiary spasm or an independent one. I am inclined to think that probably the right-hand spasm was purely sympathetic. The facial twitching I have not seen mentioned in any other report, and it is probably only a further extension of the disease. It did not occur so frequently and was not so marked as the head spasm, being usually brought on by excitement. The strabismus only occurred during excitement, but apart from the disease the condition of the eyes themselves was sufficient to account for it. What was described as rheumatic pain was, I take it, entirely nervous in origin, there being no joint or other rheumatic phenomena. Henoch states that the disease arises from some reflex irritation such as dentition acting on an unstable nerve system. This belief would appear in the majority of cases to be well founded, as many, if not all, seem to be cured on the removal of the irritating cause. If the disease is looked at as a whole the significance of the attacks of *petit mal* is increased. It points to some lesion on the surface of the brain rather than to one involving the nerve roots. As I have explained, I do not consider the head and eye oscillations to be mere, however rare, symptoms of epilepsy, but rather that they all have a significance in common. In this and similar cases probably what was at first only an instability of the ultimate nerve elements has passed insensibly into actual organic change. In hereditary cases this instability would be all the more marked and slighter exciting causes would bring about the onset. Probably the disease would prove more resistant to treatment and more likely to take on a permanent character. The lesions probably might be localised in the first and second frontal convolutions, as in monkeys. In these animals a centre for the movements of the head and eyes has been found to exist in that locality; the centre for the facial movements lies in the lower third of the ascending frontal, and therefore, if the face be implicated, the lesion, although slight and superficial, must affect a comparatively extensive area. As to the nature of the irritation, although very fair, the patient is not an albino, but it is rather suggestive that in albinism nystagmus is common through the early visual impressions being painful and of disturbing excess through the absence of pigment. Such ideas open up endless vistas of theories, which can in the present state of our knowledge only end in theories. Taking the disease *en masse*, it appears to me to be due originally to some over-action of certain nerve cells, with induced spasms in certain muscles, producing oscillation of the head and eyes, and at times through some sudden discharge of nerve energy giving rise to regular attacks of *petit mal*. The occurrence of the latter symptom is a good guide to what is going on, as it is known that it is due to a sudden liberation of nerve force. Experiment has taught that *petit mal* can be produced by irritating the cells of the cortex and thereby causing over-action of these cells and a sudden discharge of their energy. The probability is that in such cases as have been described there is an initial defect in the cortical cell nutrition, which, being determined by some reflex irritation, passes first into a temporary state of increased activity and, if the irritation be severe enough or be sufficiently long continued, of actual organic change. I hope I have made my views sufficiently clear, and I reiterate that I consider the affection a disease *per se* and not merely a subsidiary form of epilepsy.

Bath.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

PHLEGMASIA ALBA DOLENS IN THE VIRGIN.

BY DANIEL MOWAT, M.D. EDIN.

THE case described by Dr. Herman in THE LANCET of Oct. 5th recalls a similar one which occurred in my practice in January last. The patient was eighteen years of age, tall, and slightly anæmic; her menstruation was regular but somewhat scanty; she had no cardiac trouble. She was suddenly seized with pain in the right thigh, shortly after which the leg began to swell. The patient became unable to walk, and the temperature rose. The leg presented the usual appearance of "white swelling." There was no trace of sugar or albumin in the urine. Under treatment the limb began to recover, but it was several weeks before the patient was able to stand. Last September she had a slight return of the phlegmasia in the same leg. Dr. Herman's case is still more interesting as both legs were affected, the one becoming swollen as the other recovered.

Stamford-hill, N.

A CASE OF QUINTUPLETS.

BY J. W. STOKER, L.R.C.P. & S. EDIN., L.F.P.S. GLASG.

THE patient was a woman aged thirty-five years, 5 ft. 1 in. in height, of very slight build, and healthy. Her mother had given birth to twins on two occasions; apart from this no further family history has been ascertained. She had been married for six years and had borne four children at full period, and never had any difficulty in labour. Coming to the present case the patient computed that she had been pregnant for six months and said she could not understand why she felt much bigger than on former occasions. She complained of a pain (fixed) in the left side of her abdomen, and imagined that she was larger on the same side. Otherwise she felt well up to two days before her confinement. Labour set in on Sunday, Oct. 20th, at 10 P.M., and was concluded on Monday at 6.45 A.M. On that day the pains were regular, though not strong, and the contractions good. On my arrival at 3 A.M. the patient was strongly in labour, and on making an examination I found the membranes ruptured and a shoulder presenting. There was no difficulty in performing version. The child was dead (recently). On making an examination after the birth of the first child I easily became aware of the existence of more than one remaining fœtus. The membranes protruded and became tense at each pain. The presentation was a transverse one. In this case, also, there was not much difficulty in performing internal version. The child was alive and lived a couple of hours. The third fœtus was also enclosed in a separate bag, which required to be ruptured. This was a breech presentation, and the child was delivered naturally, being alive and surviving for an hour. In the fourth case the same procedure of rupturing the membranes was gone through, and immediately there was hæmorrhage to an alarming extent.

so much so that the mother collapsed. I turned as quickly as possible after administering stimulants, but the difficulty did not end here, as the chin became locked in that of the fifth. There were some difficulty and considerable delay in freeing them, though the extent of the locking was not at any time formidable. The child was dead (recently). The fifth was a head presentation and the child was delivered naturally; it was alive and lived for half an hour. The placenta was delivered about five minutes after the birth of the last child and consisted of two portions united by a narrow isthmus. One, the smaller, had two cords attached centrally and close together; the other, and larger, had two cords attached in a similar way to the former, and one where it was joined by the isthmus. It appeared to be perfectly healthy. The cord of the fourth child was so short that it had to be tied in the vagina. The mother rallied quickly and has gone on well. The children were all females and much about the same size, making a total weight of eight pounds, or, on an average, a little over one pound and a half each.

Rainham, Essex.

A PECULIAR CASE OF DISLOCATION OF THE SHOULDER-JOINT.

By C. C. BAXTER-TYRIE, M.B., C.M. EDIN.

THE methods by which a joint may become dislocated are many and various. Especially is this true as regards the shoulder-joint, and the following case, being perhaps unique, seems worthy of being added to the list of peculiar histories of causation. On Sept. 18th I was called to see a patient whom I found suffering from a subcoracoid dislocation of the head of the humerus. On inquiring as to the cause of the injury I elicited the following peculiar history. The man was returning on horseback from the smithy to his house when the horse ran away up a steep hill. The animal after going a few hundred yards abated speed, and the rider, with the intention of "taking it out of the brute," raised his hand to strike. The horse caught sight of the whip and sprang forward, with the result that the man felt an acute pain and a sense of something having given way in his shoulder. He did not fall off, but rode a little further into a farmyard, where he was helped to dismount. Had he been thrown I should have been dubious as to the above history of causation. As the weight of the whip was inconsiderable (four ounces) the explanation of the cause of injury is, I think, found in the inertia of the arm converting it into a lever of the first order. The coraco-acromial arch, instead of fulfilling its normal function of preventing displacement, acted in this case as a fulcrum. The limb from the fingers to that point acted as the "long arm," and the head and part of the neck of the humerus served as the "short arm." The inertia of the arm, left as it were behind, supplied the power, while the ruptured capsular ligament and displacement of the head of the bone would represent the work done.

Victoria-road, Keighley.

NOTES AND OBSERVATIONS ON A CASE OF SUPPOSED DELAYED INHERITED SYPHILIS.

By TOM ROBINSON, M.D. ST. AND.

A MAN aged thirty-six consulted me in January, 1890, for a swollen testicle, which he said had crept slowly and painlessly on. There was an absence of any history of gonorrhœa, injury, or previous attack. On examination the left testicle was found to be as large as a sheep's heart. The epididymis was not involved. The surface of the testicle was smooth and was somewhat pear-shaped. It had that dense, heavy feel which has always been noticed in cases of syphilitic orchitis. A most careful inquiry was made into the history of the case, without discovering any subjective or objective evidence of syphilis, the narrative being free even from evidence of the possibility of contagion. The patient was a married man and the father of four children, all of whom were apparently healthy. His wife was free from any display of syphilis, and she had never miscarried. It was not possible to carry the history of the patient any further back, as his parents had been dead for some years and he was an only child. His childhood had been, so far as he knew, a healthy one, and he certainly betrayed no evidence, so far as physiognomy or teeth were concerned, of having inherited a syphilitic taint. Sir James Paget was good enough to see the case with me, and he corroborated the opinion that it was one of delayed inherited syphilis. The patient was ordered to rub a drachm of blue ointment into the enlarged gland twice a day, and, at the same time, to take a mixture three times a day containing five grains of iodide of potassium in each dose. In six weeks the volume of the testicle had diminished until there was little apparent difference between the two organs.

Experience has already demonstrated the fact that inherited syphilis has three epochs of activity: (*a*) where it manifests itself at or about birth; (*b*) where it manifests itself during childhood; and (*c*) where the disease is delayed until after puberty. Cases such as this one are, I believe, not uncommon. If inherited syphilis will lie dormant for six years, why should not the period be prolonged to thirty-six? We know that in the acquired form of the malady there is no limit to the time in which the organism may not be attacked by the sequelæ. The sequelæ of scarlet fever, measles, and other blood diseases will spread over a number of years, and senile scrofula has become current coin in the medical profession. The interest of all syphilitic problems lies in the attempt to follow backwards the footmarks of the poison. Our difficulties are sometimes insurmountable, but there is no disease which leaves in its path so many evidences of its march and none which possesses a more potent interest.

Prince's-street, W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

A CASE OF TUBERCLE OF THE BLADDER IN A MALE; SUPRA-PUBIC CYSTOTOMY; RECOVERY.

(Under the care of Mr. W. H. BATTLE.)

WE have published this year in THE LANCET other cases of supra-pubic cystotomy for the cure of tubercle of the bladder in the male, and in most of them the results were very satisfactory. It is admitted that in this case a sufficiently long period of time has not elapsed since the patient left the hospital to enable it to be said with certainty that the man is cured, but the prospect is undoubtedly good, and the benefit already received is great. Tuberculous disease of the bladder is one of the most painful of all affections of that viscus, the frequent painful micturition being most distressing, and the patient obtaining but little rest, either day or night, whether in bed or going about. It is not surprising, therefore, that there is now a tendency to attack the disease boldly and directly when examination of the patient makes it probable that the disease is primarily of the bladder and has not extended to other parts. The results already obtained are so satisfactory as recorded that no surgeon can be blamed for refusing to continue week after week medication through the urethra with an uncertain result in cases such as that described, when an incision above the pubes will enable him to exactly gauge the extent of the mischief and arrest its progress by scraping, the bladder being subsequently drained for a few weeks. For the notes of the case we are indebted to Mr. Paterson, dresser.

A tall, strongly built man aged thirty-one was admitted to St. Thomas's Hospital, under the care of Mr. Mackellar, on July 20th, 1895. The family history was good; there was no history of phthisis. He was a married man with two healthy children. There was no illness of moment in the previous history. The first symptom noticed was severe pain in the penis five months before admission, followed by a

burning sensation during micturition; the pain was then worst at the beginning of the act. A week later he passed some blood in the urine, bright red in colour, and coming after all the urine had been expelled. He had medical treatment for this, and after getting worse for a time, with shooting pain referred to the rectum and abdomen, recovered to a great extent. About three weeks before admission the blood again appeared in the urine, the pain in the penis and bladder increased, and the urine was noticed to be "thick and mattery," depositing an abundant sediment, sometimes white and sometimes red. He stated that he had lost 2 st. in weight recently. On his admission there was nothing abnormal to be detected in the abdomen, and no fulness in the kidney region. On rectal examination the prostate could just be felt, but there was no definite enlargement. The epididymis was normal on both sides. The heart was healthy; the lungs were emphysematous. The temperature was normal. Micturition took place every hour or hour and a half when he was in bed. The urine was acid, of specific gravity 1012, and contained pus. On microscopical examination pus was present in large quantities, also blood corpuscles. On July 29th, although the patient had been lying in bed, there was more pus in the urine than on his admission. Two examinations for tubercle bacilli were made, with negative results. He had attacks of sharp pain about the "back passage," especially after defecation. There was little improvement under general treatment, and on Aug. 12th Mr. Battle (who was on duty for Mr. Mackellar) examined the patient under ether. The surface of the bladder when the sound was passed appeared to be abnormally rough, but no distinct tumour could be found. This roughness was most marked in the position of the opening of the right ureter. The bladder was also examined with the cystoscope, but with negative results. He complained of pain for some time afterwards and had a bad night although a morphia suppository of half a grain was administered. Next day the temperature was 101·4° F. On the 14th Mr. Battle performed suprapubic cystotomy. The bladder was washed out with boracic acid lotion, and about three ounces of the solution were left in. The silver catheter was also left in position, and a piece of elastic tubing tied round the penis. The usual median incision was then made, and the bladder wall exposed. A curved needle with silk was passed through the wall of the bladder on each side of the middle line. A median incision was made, and the halves were held apart by the silk sutures. The finger was introduced, and as a velvety condition of the mucous membrane was only felt the bladder was thoroughly examined with the electric light, a Sims's speculum being introduced at the upper angle. The wall of the bladder was thickened; the mucous membrane bled very readily when touched, especially in the neighbourhood of the right ureter, where some roughness could be felt. Yellowish, raised patches could be seen in places, and one long streak about half an inch wide ran down the posterior wall from the aperture. In several places granulation-like projections could be felt. These were scraped away with the finger-nail. As much of the softened tissue as possible was rubbed off with the finger. The shreds and clots were washed away with boracic lotion, and the whole was sponged out. The sides of the wound were stitched to the wound in the abdominal wall (the incision in the bladder having been previously lessened by the insertion of a silk suture), and a drainage-tube was inserted. The abdominal wound was closed in its upper part. Cyanide gauze was used as a dressing. On the 19th a tracheotomy tube of rubber was inserted, and the contents of the bladder, by means of a long tube placed through the tracheotomy tube, were drained into a vessel under the bed. The bladder was washed out daily with boracic acid lotion. The temperature was slightly raised, but was under 100°. During some days preceding the 31st the patient passed some urine by the urethra and had a return of the old shooting pains in the back passage. It was not easy to keep the tube in position. The stitches had been removed some days previously. On Sept. 14th the suprapubic tubes were removed. There was very little urine passed into the dressings, most of it being passed per urethram and without pain. There was still some complaint of pain in defecation. His general condition was good. On the 17th the urine was of specific gravity 1018, slightly alkaline, and contained a little albumin, but much less pus than when last examined. The wound closed towards the end of September, and when the patient went to a convalescent home on Oct. 3rd there was no albumin in the urine or pain in micturition. He could hold the urine for a longer period—viz., for from two to three hours—had become much stronger, and had put on flesh considerably.

Remarks by Mr. BATTLE.—This case was a fairly typical one of tuberculous disease of the mucous membrane of the bladder. It is true that no tubercle bacilli were found in the specimens of urine examined, but it is notoriously difficult to find tubercle bacilli in the urine, and the condition of the bladder was of itself convincing proof of the nature of the disease when it was exposed at the time of operation. It is very probable that in this patient the bladder affection was primary, and not secondary to any disease of the kidneys. Careful examination under an anæsthetic failed to give any evidence of renal enlargement on either side. The patient was a big man, with strong abdominal muscles, so without the use of an anæsthetic it was not possible to speak definitely on this point. Examination of other parts, such as the lungs, prostate, and epididymis, showed no disease. A still more satisfactory proof as to the healthiness of the kidneys was afforded by the condition of the urine when the patient left the hospital at a later date. It also showed the remarkably improved state of the bladder. It is quite evident that no other method of treatment would have been so efficient as the one adopted; the disease was scattered irregularly throughout the bladder, even in the fundus, and could have been but slightly affected by intra-vesical medication. By scraping away all the diseased patches with the finger-nail and then giving prolonged rest to the bladder the best chance of cure was given. In my opinion drainage alone, even when prolonged, is not likely to be so effective, otherwise a better result would have been obtained in times past when the perineal route was used. It is too early, perhaps, to say that the man is cured, but there is no doubt of the great relief which he has obtained. I am much indebted to Mr. Fox-Symons, who was the house surgeon when the man was under treatment, for his attention to the case.

VICTORIA HOSPITAL, HULL.

CASES OF BASAL (SUBARACHNOID) DRAINAGE; REMARKS.

(Under the care of Mr. ALFRED PARKIN.)

WE are pleased to be able to place before our readers notes of two more cases in which drainage of the ventricles has been carried out for hydrocephalus. It is evident that the operation for the insertion of the drain is not one which is either difficult or prolonged, and no physician need hesitate in recommending it for fear that it should be too severe for the child. The drainage should be gradual and continued for some days. The result in the first case was undoubtedly satisfactory. The second teaches a valuable lesson as regards the rate of drainage advisable. The other cases alluded to by Mr. Parkin in his remarks belong to a more unfavourable class for treatment of any kind, and the prognosis, from the fact that in each patient unconsciousness had set in for some hours, was exceptionally bad. Perhaps the physician will be able some day to define more clearly the point in the progress of a tuberculous meningitis when the interference of the surgeon may be requested with a greater possibility of success.

CASE 1.—A male child aged three and a half years was admitted into the Victoria Hospital, Hull, on Feb. 27th, 1894, for fits. The head was large, globular, nineteen inches and a half in circumference, and out of proportion to the rest of the body. The anterior fontanelle was still open, but there was no extension backwards between the parietal bones. The child was said to have had numerous fits since birth, apparently of a general character, and recurring about once or twice a month. There was little sign of intelligence; he was unable to talk or walk, and the bowels and bladder acted involuntarily. No attempt was made to pick up or play with toys. The sight was apparently good, there being no changes in the disc. The condition being obviously one of chronic hydrocephalus, it was determined to drain the subarachnoid cavity in the manner adopted by Mr. Parkin and described in THE LANCET of Nov. 18th, 1893. This was accordingly done on March 17th by removing a small piece of the occipital bone a little to one side of the median line by means of a gouge, enlarging the opening with forceps until it was the size of a sixpenny-piece, incising the dura

mater, and inserting a small silk drain beneath the cerebellum after first passing a curved probe into the cavity of the fourth ventricle so as to open up the post-medullary velum in case the normal openings had become closed for any reason. In this way excellent drainage was established without allowing a too sudden or a too copious discharge of cerebro-spinal fluid. The after-history of the case was marked by a gradual but steady improvement, which has continued up to the present time. The wound healed rapidly; there was no rise of temperature, and the general condition remained excellent. Two days after the operation the knee-jerks, which were previously absent, returned, and the next day attempts were made to take hold of things. A week later the child began to sit up by himself and showed marked indications of returning muscular control. The drain was kept *in situ* for twenty-eight days and then removed; the removal was followed by an attack of sickness and general irritability, but these symptoms disappeared at the end of another week. On May 22nd the patient could stand against a wall without any assistance, and could raise himself into a sitting posture. On July 3rd he was reported by the mother to be able to stand without any support, to be able to say a great many words, and to show altogether many more signs of intelligence than he had previously displayed. On Jan. 8th, 1895, he was seen by Mr. Parkin among the out-patients; he could talk fairly well, recognise different objects and persons, and could walk if assisted with the hand. Since the operation he has grown two inches and a half, and the bodily increase in size, along with an absence of cranial increase, has almost removed the disparity which previously existed. When last seen by Mr. Parkin, in June, the improvement was even more marked.

CASE 2.—The patient, a male child aged five months, was admitted for fits and enlargement of the head on Aug. 20th, 1895. The circumference of the head was eighteen inches; the fontanelles and sutures were widely opened. The history pointed to congenital syphilis. There was double otorrhœa. The body was emaciated; the child was anæmic and took food badly. Basal drainage was set up on Sept. 3rd, and kept up by the insertion of a horsehair drain. For the next three days the child seemed very much better; a considerable quantity of fluid drained away, and everything seemed satisfactory. Four days after the operation vomiting set in, followed by a rise in temperature to 103° F., and death occurred from hyperpyrexia, due to the withdrawal of too much fluid, six days after the operation. Post mortem there was a general distension of all the ventricles, which still contained a considerable quantity of fluid. There were no septic changes about the wound, which was quite healed.

Remarks by Mr. PARKIN.—The very interesting and successful case of hydrocephalus treated by basal drainage—recorded in THE LANCET of Nov. 2nd, 1895—by Dr. Glynn and Mr. Thelwall Thomas has suggested to me the advisability of putting on record the above cases. The first case is instructive from the gradual improvement, dating from the operation, and perhaps more from the mental than from the bodily changes which have resulted. In the second case there appeared from the outset to be little chance of doing the child much permanent good, but it did not seem right to deprive him of the possible advantages from relief of the intra-cranial pressure which such an operation readily gives. The operation itself in children is extremely easy and can be readily done in ten minutes; in such cases there is generally instantaneous relief, as evidenced by alteration in the pulse and respiratory rates. The drainage is direct, and there is no necessary bruising of, or damage to, brain substance. I have operated so far in only four cases of tuberculous meningitis, and have not yet been able to come across a case where coma had not developed. It is obvious that in order to do good it is advisable, if not absolutely necessary, that operative measures should be undertaken in the early or irritative stage in order to ensure more successful results. In all the cases noted below the patients undoubtedly lost their distension pain, and life was prolonged from one to two weeks. The first case was that of a male child aged six months, with abdominal symptoms followed by convulsions rapidly passing into coma, the head symptoms having lasted for ten days before his admission. He was operated on six hours after he had become comatose and lived for twelve days after the operation. Post mortem there was found to be general tuberculosis, with tuberculous meningitis, the disease originating in the mesenteric glands. The second case was that of a female child aged three years. All the symptoms of tuberculous meningitis from caseous mediastinal glands, following whooping-cough, were present. She was operated on in the third week of the disease and was in a comatose state. She died four days later. No post-mortem examination was allowed. The third case was also that of a female; she was aged ten and was admitted for phthisis of the left apex, and for head symptoms of fourteen days' duration. She became delirious and unconscious, with marked symptoms of meningitis. She was operated on twelve hours after unconsciousness had supervened, and died ten days later. No post-mortem examination was allowed. The fourth case I have already recorded in the columns of THE LANCET.[1] The patient was operated on in deep coma, with Cheyne-Stokes breathing. The breathing became quite natural after the operation, death ensuing sixteen hours later.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

The Non-existence of Round-celled Sarcoma as a Distinct Class of New Growth.—Hæmatoporphyrin in the Urine after Administration of Sulphonal.—Relation of Biliary Calculi to Malignant Disease of the Liver.—Dermoid Tumour of the Testis.—Exhibition of Specimens.

AN ordinary meeting of this society was held on Nov. 5th, Mr. BUTLIN, President, in the chair.

Dr. SNOW read a paper on the Non-existence of Round-celled Sarcoma as a Distinct Class of New Growth. He said that a generation since the term "soft cancer" was loosely applied to any malignant tumour of soft consistence, no matter from what tissue it had sprung. At the present day the word "sarcoma" was frequently used in a similarly vague sense, and, in particular, "round-celled sarcoma" denoted almost any rapidly growing mass of round or oval cells whose origin was often doubtful. The lesions commonly so designated fell into three groups, and were either (*a*) carcinomata, (*b*) lympho-carcinomata, or (*c*) blastomata. Of the first, the huge encephaloid cancers of the female breast were the type. There was only slight concurrent enlargement of the axillary glands; examined at the core they consisted of a loose mass of cells and cell débris, with little acinar structure; a thin section, however, from the growing margin would display the familiar acini of mammary carcinoma. True sarcoma was rather rare in the breast, except in association with cysts. The second group, lympho-carcinoma, sprang from adenoid tissue in some form or other, to which appertained the bone marrow. As well as in the more external glands, the growth might be developed in those of the abdominal cavity and mediastina, in the tonsils, spleen, omentum, &c. The variety also comprised the central tumours of bone. The third, blastoma, sprang from uneffaced embryonic vestiges; it might very largely consist of round-celled parenchyma, but this was most commonly largely mingled with other structures, tubules, cysts, acini, &c.; its favourite sites were the kidney, ovary, and other derivatives of the Wolffian body. After careful study for many years past of all the specimens which presented themselves, Dr. Snow had been forced to the conclusion that no malignant tumour composed of round cells alone originated in the connective tissues; that every sarcoma, properly so called, contained much spindle-celled tissue, or spindle-cells ranged in bands and that none could be held genuine without this pathognomonic badge.—Mr. BOWLBY thought that the question at issue was really what names should be given to certain microscopic specimens; the specimens labeled lympho-carcinoma he should call sarcoma. The demonstration of the existence of melanotic carcinoma of the skin did not disprove the existence of primary melanotic sarcoma of that structure.—Mr. W. G. SPENCER said that melanotic papilloma was a common growth in pug dogs, and in old dogs it might develop into melanotic carcinoma. He deprecated the use of the term "blastoma," which was loosely applied to all kinds of new growth.—Mr. JACKSON CLARKE said that the

[1] THE LANCET, July 1st, 1893.

specimens labeled sarcomata, he should put down as carcinomata.—The PRESIDENT remarked that there was no kind of disease about which there was so much difference of opinion as the round-celled sarcomata. Later we might have to make a division amongst these growths according to their origin, but we had at present no basis for forming such a classification.—Dr. SNOW, in reply, said that he was quite prepared to find that he had no supporters of his heresy. He had pointed out what he regarded as a straightforward definition of sarcoma, which was that this neoplasm, as the true offspring of connective tissue, was characterised by the occurrence of bands of spindle cells. He held that the very cells which secreted melanin in the skin were the cells of the Malpighian layer of the epidermis, and it was from these that the malignant pigmented growths of the skin sprang. In the eye melanotic sarcomata sprang from the pigmented connective tissue structures. The term "blastoma" was a convenient one to include a class of malignant growths derived from unobliterated fœtal rudiments which did not fall into the ordinary groups of sarcoma and carcinoma.

Dr. ARCHIBALD GARROD and Mr. HOPKINS contributed notes on the Occurrence of Large Quantities of Hæmatoporphyrin in the Urine of Patients taking Sulphonal. After pointing out that hæmatoporphyrin was present in traces in normal urine and in larger amounts in many morbid conditions, they proceeded to discuss its occurrence in much larger quantities still in the dark-red urine of some patients who had as a rule taken sulphonal for some time. The evidence connecting this with sulphonal was discussed, and an epitome was given of the associated clinical symptoms and post-mortem appearances in the published cases. The patients were nearly always women who had taken the drug without ill-effects for weeks, months, or even years previously. Abdominal pain and vomiting were prominent symptoms, and death in collapse frequently followed shortly upon the onset of the symptoms, which might only develop after the drug had been discontinued. Alkaline treatment appeared to have been useful in some cases. Clinical histories of three cases (of women taking sulphonal), supplied by Mr. J. Delpratt Harris, Dr. W. M. Abbot Anderson, and Mr. M. J. Nolan, were then given. All the cases ended fatally, but no post-mortem examinations were made. In one instance sulphonal had been taken for four years, and the symptoms only commenced ten days after the drug was stopped. A detailed account was then given of the general and spectroscopic characters of the dark-red urine of these patients. Tube casts were present in each instance. Even the trace of iron found in normal urine could not be detected. Various methods were employed for the extraction of the hæmatoporphyrin, and it was found that the soda and ammonium chloride methods, which worked so satisfactorily in ordinary cases, were quite unable to cope with the amount of the pigment present in these specimens. Repeated extraction with acetic ether was found very useful for the partial separation of the abnormal pigments present. In each instance the colour of the urine was only in part due to ordinary hæmatoporphyrin. In one case there was present much of a pigment derived from hæmatoporphyrin which yielded two absorption bands like those of oxyhæmoglobin. In a second case another derivative of hæmatoporphyrin was found, and in all the dark tint of the urine was largely derived from a reddish-brown pigment, such as was observed by Hammarsten, which yielded no spectroscopic absorption bands. The views of Stokvis as to the origin of urinary hæmatoporphyrin were referred to.

Mr. C. BEADLES read a paper on the Relation of Biliary Calculi to Malignant Disease of the Liver. He described the two chief theories which had been current to explain the coexistence of gall-stone with cancer of the liver. The first, which might be called the "irritation" theory, was that gall-stone was formed first and by acting as a foreign body set up irritation, which led to malignant growth. The second, or "concentration," theory stated that the gall-stone arose as a secondary result from stagnation of the bile in the ducts caused by their obstruction from malignant growth. The differences observed between primary and secondary carcinomatous growths of the liver as to situation and naked-eye characters were pointed out. Of 100 post-mortem examinations at the Cancer Hospital 4 were cases of primary carcinoma of the liver, and all had calculi in the gall-bladder; 36 had secondary carcinomatous growths in the liver, but there were no gall-stones present in any of them. Of 9 cases of primary carcinoma of the liver at Colney Hatch 5 were males and 4 females, and gall-stones were present in 7, being absent in 1 male and 1 female. These facts supported the theory of irritation, the carcinoma arising as a secondary result of the irritation produced by the presence of the calculi. A remarkably high percentage of insane people showed gall-stones post mortem, and in the majority there was no sign of co-existing inflammation of the gall-bladder or ducts.—Mr. SHATTOCK regretted that more histological detail was not given in the paper. If the carcinomata arose from irritation of the bile-ducts by calculus the columnar variety should be found.—Mr. W. G. SPENCER said that a clear distinction should be drawn between primary cancer of the liver and cancer of the gall-bladder.—Dr. VOELCKER said he had made 7 necropsies on cases of primary cancer of the liver and gall-bladder. In 2 cases the growth was primarily of the gall-bladder, a tubular carcinoma, and in both gall-stones were present. In 5 cases of primary cancer of the liver no gall-stones were present. In the post-mortem room of Middlesex Hospital last year 10 per cent. of the cases examined were found to possess gall-stones. In the cases in which evidence of irritation was present, such as adhesion and thickening, no cancer was found.—Mr. BEADLES, in reply, said that full details of the site of origin of the growths and of their histology were given in the paper.

Mr. JACKSON CLARKE showed a Dermoid Tumour of a Testis which had been presented to St. Mary's Museum by Surgeon-General Giles, who removed it from an infant aged one year. The following description of the growth was given. "A right testis containing a dermoid cyst as large as a hen's egg. The cyst is everywhere invested by the tunica albuginea; its cavity is almost entirely occupied by a large intra-cystic projection which springs from the region of the hilus and contains bone and cartilage. The remaining cleft-like space is filled with hairs and sebaceous matter. The microscope shows that the cyst is lined by skin containing pilo-sebaceous follicles and sweat glands. No trace of the tubules of the testis can be found in the loose areolar tissue which lies between the cyst wall and the albuginea, though the vas deferens and vessels are normal." The condition was a rare one, only one other case being recorded in the Transactions of the society—namely, by Mr. D'Arcy Power. The opinions of Lannelongue, Jacobson, Bland Sutton, and others were briefly discussed. As to diagnosis, cystic sarcomata occurring in infancy were alone likely to give even a superficial resemblance to the condition in question. When the cyst formed in the interior of the testis the treatment was that practised by Surgeon-General Giles in this case—namely, castration.

The following card specimens were shown:—
Mr. BEADLES: Ureter obstructed by Calculus.
Dr. WILLCOCKS: Perihepatitis and Thrombosis.
Dr. WALSHAM: Pulmonary Stenosis.
Mr. EDMUNDS: Myxoma of Breast.

ÆSCULAPIAN SOCIETY OF LONDON.

Urethral Stricture with complications.—Exhibition of Cases and Specimens.

A MEETING of this society was held on Nov. 1st, Dr. E. F. WILLOUGHBY, President, being in the chair.

Dr. C. G. MACK read notes of a case of Urethral Stricture with complications in a man aged seventy-two years. The stricture was of twenty-three years' duration, and led to the formation of a peri-urethral abscess with consequent perineal fistula. A period of catheterisation followed. A year and a half ago rapid dilatation by means of graduated bougies was carried out until a No. 12 passed the stricture. The urine contained pus and also casts of renal epithelium. Four months later a large perineal abscess formed and was opened, urine passing through the fistula, and this was followed by the formation of others of small size. For a time the patient improved, but retention followed and was accompanied by persistent hæmorrhage from the urethra and fistulæ. While in this condition a soft rubber catheter was passed, tied in, and removed daily, the bladder being washed out with weak Condy solution followed by a copious douche of boric acid. Under this treatment all troublesome symptoms disappeared and the patient was able to micturate freely and to follow his occupation. The syphon douche was used.

Dr. J. T. CONNER showed two cases of Pigmentation of the Lips and Mouth in twins, both girls, aged twelve years, of dark complexion and anæmic. The pigment spots, which were only noticed two years ago, were of ink-black colour, mostly of very small size, and scattered over the lips (especially the lower), gums, and hard palate, but not on the tongue.

Dr. CONNER also showed a case of Chronic Ptyalism (hygrostomia) in a woman aged sixty-eight. It had lasted for ten years without intermission. The flow occurred at night as well as in the day. In fact it was greater when the patient was in bed, and considerably interfered with sleep. The secretion of one night was shown. It was an opalescent fluid with a cloudy viscid deposit and amounted to 3 oz. The reaction was acid, the specific gravity 1006, and it readily converted starch into sugar. The patient had lost all her teeth and did not use artificial ones. The mouth was unduly moist; otherwise there was nothing abnormal and her general health was good. Dr. Conner believed that this form of salivation had not been previously recognised; but he had found a case anonymously recorded[1] which curiously corresponded to his in almost every particular—age, sex, absence of teeth, and preservation of the general health. He also compared these cases with the opposite condition (xerostomia), which in all other respects they resembled.

Dr. A. K. CHRISTIE showed a specimen of Fatal Endocarditis in a female child aged nine years. She belonged to a generally healthy family, only one member of which suffered from rheumatism. The patient's personal history was absolutely free from any rheumatic taint. She appeared to be well on Oct. 2nd, became suddenly drowsy towards evening, and died the next morning. A post-mortem examination showed the viscera to be generally healthy but for the evidences of old and recent endocarditis, especially on the mitral valve. There was also a softened patch on the anterior wall of the left auricle studded with small soft vegetations. Embolism from the detachment of one such vegetation was suggested as the cause of death.

Dr. B. G. MORISON showed specimens of Branching Casts of Plastic Bronchitis expectorated with some hæmorrhage by an elderly man of rheumatoid type.

ISLINGTON MEDICAL SOCIETY.

Acute Inflammation of Bone.—The Islington Workhouse Infirmary.

A MEETING of this society was held on Oct. 22nd, Dr. WHITE being in the chair.

Mr. BATTLE read a paper on Acute Inflammation of Bone as it is met with in children over five years of age. He divided the cases met with into three classes according to their severity, and gave the principal points which assist in diagnosing the condition from other diseases. He then discussed the treatment, advocating very strongly an early incision through the periosteum without waiting for fluctuation, in order that the fever might be cut short, necrosis prevented or much limited in extent, suppuration in joints prevented, and the risk of pyæmia minimised. He gave examples from his practice to illustrate this part of the subject, and showed a patient. The treatment of these cases when a joint was invaded was now considered and conservative measures advocated. The endurance of these patients was commented on, and examples given to show the good result which may follow patient treatment in some instances. Two cases were shown, both of which had been under care some years ago. One had ankylosis of the knee in consequence of extension of the inflammation through the epiphysis to the joint. The other had perfect use of the knee-joint, which had suppurated and been drained four years ago. Each had had extensive necrosis of the tibia. In the one there had been no growth at the upper end of the tibia since the sequestrotomy. In the other, where suppuration in the joint had resulted, growth of the tibia had continued unimpaired. In one case mentioned the patient recovered after suppuration in the knee, ankle, and big-toe joints.

On Oct. 30th a special meeting of the society was called to consider the duty of the society in respect of the present crowded condition of the infirmary and its insufficient medical staff. The following resolution was passed: "That the members of the Islington Medical Society desire to express their deep concern at hearing of the overcrowding of the Islington Workhouse Infirmary and the admitted insufficiency of the medical staff in attendance on the sick. Having in the course of their professional duties to advise poor patients to go into the infirmary, they cannot but feel much hesitation in doing so if such a state of things continues. The Islington Medical Society would respectfully urge upon the board of guardians to take immediate steps to remedy the overcrowding in the wards, and to provide such additional medical, dispensing, and nursing assistance as the great number of patients in the infirmary really needs."

[1] THE LANCET, April 9th, 1892, p. 845.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Etiology and Treatment of Gastric Ulcer.

A MEETING of this society was held on Nov. 1st, Dr. A. SYMONS ECCLES, President, being in the chair.

Dr. DONALD HOOD, in opening the discussion from the medical standpoint, said his remarks would be confined especially to considerations on diagnosis in those cases where symptoms are indefinite, ambiguous, and often misleading. He would refer to the importance of weighing well the value of the symptom hæmatemesis, and he would draw special attention to the careful differentiation between various forms of acute abdominal pain with a view to diagnosis at the earliest possible moment of the existence of perforative ulcer. He proceeded to give a brief clinical picture of the most important subdivisions of groups under which gastric ulceration practically came before practitioners for treatment. He cited a case which had been judged to be one of merely prolonged dyspepsia, but which an examination after death proved to have been one of extensive recurrent ulceration, producing much contraction of the stomach and leading to perforation of the diaphragm. He referred, also, to a case of acute perforation and severe hæmatemesis in a young anæmic girl, and in connexion with this he adduced certain criteria which would help to differentiate cases of hæmorrhage caused by organic breach of the stomach walls from those which frequently occurred in early adult female life without any such breach—a condition for which he proposed the name "hæmatemesis puellaris."

Mr. BRUCE CLARKE, introducing the surgical side of the discussion, began by referring to the rarity of perforations of gastric and duodenal ulcer. He described two principal varieties, those in which collapse was the prominent symptom, and a second variety in which the extravasation of intestinal or gastric contents was more gradual. These cases were often indistinguishable from intestinal obstruction, and, indeed, gave rise to it by the peritonitis which they set up. There was only one keynote to success in ruptured ulcer and that was early diagnosis and early treatment.

Dr. F. H. ALDERSON thought that gastric ulceration when unaccompanied by hæmorrhage and vomiting was frequently overlooked. He commented on the rarity with which gastric ulcer was assigned as a cause of death, and quoted the Hammersmith statistics for five years, where out of 8305 deaths only 11 were assigned to this cause. He narrated a fatal case from his own practice in which at an early stage, owing to the absence of definite symptoms, diagnosis was impossible. In this case the patient was an adult male.

Dr. SEYMOUR TAYLOR spoke only of that form of ulcer which is found almost exclusively in young women and is clean and punched out in appearance. He argued that this was an almost constant incident in the clinical history of prolonged cases of chlorosis, and cited authorities who had noticed this connexion. He pointed to the common factors of age, sex, and neurosis, and held that neuropathy was the starting point in chlorosis. Further, the ulcer in its appearance and character approaches those ulcerations which are distinctly neuropathic, tabetic ulcers, herpes, &c. He held that the connexion was further established by treatment. He maintained that the embolic theory was untenable in view of the splendid collateral circulation of the stomach.

Dr. CAMPBELL POPE called attention to the remarkable rarity of gastric ulcer among certain vegetarian populations. For treatment he preferred belladonna to opium in the earlier stage, and later he used arsenic and iron.

Mr. KEETLEY contrasted the signs of perforation in various situations, and advocated early operation, even at times without waiting for recovery from shock and without an anæsthetic.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

Chronic Nasal Obstruction.

A MEETING of this society was held on Tuesday last, Dr. ERNEST CLARKE, President, being in the chair.

Mr. MAYO COLLIER read a paper on the above subject, in which he reminded his audience of the extraordinary frequency of the condition. He next showed that this state of things was seldom or never congenital, but was progressive, commencing at or about the time of puberty to increase with the development of the parts. Having enumerated a long list of affections the direct outcome of obstruction to the nasal passages, he pointed out the serious and irreparable damage often done to the young growing skull by leaving things to themselves. Moreover, the symmetry of the face and beauty of the countenance were in many cases lost or impaired. The commonest effects on the growing skulls of young persons were a pinched and flattened or hatchet-shaped appearance of the face, comparative smallness of the upper jaw, high, arched palate, with crowded and irregular teeth. Associated with this were often general anæmia and stunted growth.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

Exhibition of Cases and Specimens.

A MEETING of this society was held on Oct. 24th, the President, Dr. PORTER, being in the chair.

Mr. SNELL introduced: 1. A woman with Embolism of the Central Artery of the Retina; she had mitral and aortic disease. 2. A man aged forty-eight with Extreme Myosis, Argyll-Robertson Pupils, and loss of Knee-jerks. He had been under observation for years in practically the same condition. 3. A man with Traumatic Palsy of both Sixth Nerves. Mr. Snell drew attention to the cases of traumatic palsy on record, specially mentioning the valuable papers of Purtscher and Friendwald. It appeared that the other cranial nerves were more liable to suffer from trauma than the sixth pair, and when the latter did suffer other nerves were implicated. Altogether fifty-seven cases were on record, and seventeen were bilateral. 4. A girl with Bilateral Palsy of External Recti and Double Papillitis. Headache and sickness were the other symptoms suggesting some intra-cranial growth.

Dr. SINCLAIR WHITE exhibited and related particulars of: 1. A case of Trephining for Temporo-sphenoidal Abscess due to Suppurative Middle-ear Disease. An abscess containing two ounces of offensive pus was cleared out and disinfected, but in spite of this the patient got worse. Four days later the wound was reopened, more bone removed, and a second independent abscess discovered and treated. Although the lad appeared to be *in extremis* he rapidly recovered after the second operation, and is now quite well except for his deafness. 2. A large number of Gall-stones removed from a Suppurating Gall-bladder. Owing to the distended gall-bladder being bound down by omental adhesions it was not in contact with the anterior abdominal wall. This fact, conjoined with absence of history of hepatic colic, rendered a diagnosis difficult prior to exploration. The patient, a woman aged fifty-three, made a good recovery. 3. A girl aged seventeen years, from whom the Right Astragalus had been removed eighteen months previously for a myeloid sarcoma. Excision was done through a single external wound. The resulting foot was both shapely and useful, the girl being able to walk several miles without fatigue. The arch of the foot was preserved, and, contrary to what is generally taught, there was considerable movement at the new ankle-joint. Dr. White had not been able to find a case of excision of the astragalus for tumour on record.

Mr. DALE JAMES introduced a case of Paraffin Acne. The patient was a boy who worked in a wire mill, where, the wire having been hardened in a tank of crude paraffin, he had to make it up into rolls. Hence his clothes became saturated, and the eruption appeared about a month after he began this work. Three other boys working in the same mill are similarly affected. The eruption is chiefly on the legs, on the anterior and lateral aspects, and on the forearms. It is confined to the follicles and presents various appearances—i.e., a black plug filling the follicular opening; a second stage in which the plug is raised at the summit of a papule; further in which the papule is inflamed, and again when this is surrounded by a flush; and, finally, there are several places in which a very small fleshy tumour is substituted for the papules. Innumerable minute scars mark the seats of past lesions.

Dr. ARTHUR HALL showed two cases of Syphiloderma and one of Circumscribed Scleroderma.

Dr. BURGESS showed a case of Xanthoma Multiplex. The patient had been jaundiced for over a year from hypertrophic cirrhosis of the liver.

LIVERPOOL MEDICAL INSTITUTION.

Large Vesical Calculus.—A Method of producing Rapid Delivery in Puerperal Eclampsia.—Villous Tumour of the Bladder.—Professor Fraser's Snake-bite Antidote.—The Subsequent History of twenty-three cases of Typhlitis.

AN ordinary meeting of this society was held on Oct. 31st, Mr. CHAUNCY PUZEY, President, being in the chair.

Mr. GEORGE HAMILTON showed, as a card specimen, a Vesical Calculus which he had removed and which weighed over half a pound.

Dr. T. B. GRIMSDALE related a case in which he had induced Rapid Delivery by deeply Incising the Cervix Uteri. The patient was suffering from Puerperal Eclampsia. Before the operation the os would just admit the finger; after the incisions were made the forceps could be easily applied, and a living child was extracted in three or four minutes. The incisions were four in number, radiating from the os and extending through the cervix to the vaginal reflexion. After delivery the fits diminished, and in twenty-four hours the patient had regained consciousness, but four days later she became maniacal and did not recover from this for five weeks. The albumin disappeared from the urine on the third day.—Dr. BRIGGS considered that where rapid delivery was easy and the cervix thinned and moderately dilated there could be no objection to speedily emptying the uterus, but thought that in many cases rapid withdrawal of the uterine contents would not be desirable.—Dr. IMLACH and Dr. DAVIES also made remarks on this case.

Mr. NEWBOLT showed a young man aged twenty-one years who had been under his care since June, 1894. For three years he had complained of great pain during micturition, with sudden stoppage of the flow and the frequent passing of blood. A sound detected a soft substance in the bladder, which bled readily. The bladder was opened above the pubes on several occasions, and a quantity of villous growth could be seen surrounding the orifice of the urethra and covering the whole surface of the mucous membrane except at the summit of the bladder. Removal of considerable portions of the tumour was made from time to time by a Volkmann's flushing spoon, the severe hæmorrhage being controlled by very hot water. The last operation was performed in April of this year, and the patient was now much improved in every respect, but still suffered from frequent sharp pain in the left loin. This pain, Mr. Newbolt thought, was probably due to contraction of the orifice of the ureter or blocking of it by growth. There was now no pain during micturition or bleeding, but there was a small deposit of pus.—Mr. PAUL, Dr. BRIGGS, and Dr. ROSS made remarks on this case.

Dr. LOGAN showed Professor Fraser's Anti-venine both as a liquid serum and in the crystalline form.—Mr. NICHOLSON said there was no doubt as to the scientific value of Professor Fraser's work, but he questioned whether the antidote would have any practical value in India. Considering the enormous population of India, death from snake-bite was very infrequent. Every case of snake-bite was not necessarily fatal; on the contrary, numbers of persons recovered, and various antidotes gained great credit in consequence.

Mr. R. W. MURRAY divided his twenty-two cases of Typhlitis into three groups. They were all collected from the records of the Children's Infirmary, Liverpool, since 1886. The numbers by no means represented all the cases treated during that period, but those of which he had notes and whose subsequent history he had been able to trace. With one exception no case was more recent than two years ago. He then gave the groups as follows: 1. Nine patients in whom there was inflammation of the vermiform appendix, with, most probably, a slight and strictly localised peritonitis; these all recovered under medical treatment and remained well, though three of them were relapsing cases; the

period that has elapsed since their admission varied from three to seven years. 2. Ten cases, where there was a localised peritoneal abscess due to inflammation of the appendix in which the abscess was simply opened and drained; nine of the children remained well, the time which has elapsed since operation varying from three to six years; one died from suppurative peritonitis owing to an accident during the syringing of the wound. 3. Three cases where the appendix rapidly became gangrenous and perforated; they all died.—Dr. GLYNN referred to the difficulty sometimes experienced in distinguishing between chronic inflammatory induration in the region of the cæcum and malignant disease of that part. He believed that the inflammatory cases commenced with acute symptoms, pain, and constipation, whereas in malignant disease there was often diarrhœa with discharges of blood and mucus.—Mr. RUSHTON PARKER said that, where perforation of the appendix occurred, general septic peritonitis and death speedily resulted. He had seen several cases of typhlitis in adults where the question of abdominal section was raised, but recovery took place under rest and opium. He was convinced that promiscuous operation was not indicated in typhlitis, whether attended by intestinal obstruction or not.—Mr. PAUL thought that in adults there was undoubtedly a class of cases which could not be freed from a recurring danger without operation, whilst the operation, if undertaken at the right time, was almost always successful and devoid of risk.—Mr. RAWDON said that during the time he was surgeon to the Children's Infirmary all cases which suppurated did well, and he could not remember a single instance of recurrence.—Mr. LARKIN remarked that in his opinion the recurrent cases of appendicitis were a distinct clinical group, and only to be cured by removal of that structure.—Mr. A. DAVIS referred to the injurious effects of purgatives and the marked beneficial effects of opium in these cases.—The PRESIDENT, Dr. BANKS, Dr. P. DAVIDSON, Dr. BOYCE, and Dr. ABRAM also took part in the very interesting discussion on Mr. Murray's paper.

PLYMOUTH MEDICAL SOCIETY.

Otorrhœa and some of its Complications.

AT the meeting held on Oct. 26th the Hon. Secretary read (in the absence of the author) Mr. CHAS. E. BEAN'S paper on the above subject. The writer confined his remarks to the salient features of chronic purulent otitis media and its more usual complications. The records of the Devon and Cornwall Throat and Ear Hospital showed that out of 2160 aural cases 660, or 30·5 per cent., were classed as "otorrhœa." The gravity of its effects were shown by the figures of the Registrar-General, wherein from 300 to 400 deaths are annually returned as due to "otitis." Mr. Bean then proceeded to the symptoms, course, and treatment of cases of chronic purulent otitis media, emphasising the need for drying the middle ear thoroughly after antiseptic irrigation; the careful use of the curette when removing granulations, carious bone, and fragments of membrana tympani; and the use of cocaine as a hæmostatic. The complications described were perforation of membrana; polypi; caries and necrosis of temporal bone, with abscess of parotid gland, especially in children; implication of the mastoid antrum and cells, and the indications for operation; and intra-cranial diseases, including (*a*) extradural abscess, (*b*) meningitis, (*c*) cerebral and cerebellar abscess, and (*d*) sinus phlebitis, associated with which may be thrombosis of the internal jugular vein and ulceration of the internal carotid artery.

In discussing the paper, Mr. ELLIOT SQUARE pointed out the value of instilling cocaine previously to operating under a general anæsthetic, both to check hæmorrhage and to prevent movements during imperfect anæsthesia.

Mr. LUCY exhibited a specimen of the Left Temporal Bone removed from a boy aged five years, which showed the large size of the mastoid antrum, its porous roof, and the small size of the mastoid process and the absence of cells.

Mr. WEBBER urged the part played by post-nasal adenoids in causing otorrhœa, and cited an interesting case of hæmorrhage from both ears (recorded in THE LANCET of March, 1894).

Dr. RIDER concurred as to the frequent association of adenoids and otorrhœa, urged the cautious use of chromic acid, and pointed out the dangers of plugging the meatus with powders or wool.

Mr. WOOLLCOMBE recommended the more frequent clearing out of the mastoid antrum and cells previously to other operative measures.

Mr. WHITEFORD cited septic affections of the pharynx as causes of otorrhœa, and urged the advisability of clearing out thrombus from the lateral sinus and internal jugular vein.

Reviews and Notices of Books.

The Growth of the Brain: a Study of the Nervous System in relation to Education. By HENRY HERBERT DONALDSON, Professor of Neurology in the University of Chicago. London: Walter Scott and Co. 1895. Price 5*s*.

THIS volume is one of the excellent Contemporary Science Series, edited by Mr. Havelock Ellis, and contains a very large number of facts of great interest, which are, no doubt, for the most part gathered from well-accredited sources, but which it is extremely convenient to have at hand in a collected series and in a well-arranged form. It is indeed in the arrangement of large masses of facts and statistics and in the demonstration of their connexion with each other that the chief value of a work like this consists, and we can say with confidence that Professor Donaldson has executed his work with much care, judgment, and discrimination. The introductory chapter describes the nature of a cell and the process of fertilisation. He refers to the recent calculations of Francke that the human body contains, including the blood corpuscles, rather more than twenty-six billion—or million million—cells, an amount which, although inconceivably great, yet, supposing each cell to be 1000th of a cubic millimetre, might be contained in a cube having a side of 2·8 centimetres (about $1\frac{1}{10}$ in.), or in a space of 22·5 cubic centimetres. The power of growing seems to be closely connected with length of life, but as yet there is no adequate explanation of the fact that some animals live longer than others; and, as the larger animals have longer lives, long life is associated with size, and the author points out that size depends upon two factors: the rate of growth and the length of time that growth continues—so that animals that attain a large size grow both rapidly and for a long time. A table that is given shows that the rate of increase in the rabbit and in man is about the same, but, owing to the fact that in man growth continues for about twenty-five years, whereas in the rabbit it stops at the end of one year, the difference in the final size of each is very great. Since, then, natural death is the result of old age; since, further, old age is not attained until growth has been completed, and large size depends on long-continued growth: therefore long life and large size are found associated. From the moment of birth there is a rapid falling off in the proportional daily increase in the body-weight in all the higher animals—a time soon comes when increase ceases, and the body then becomes more susceptible of destructive influences. With the decay of any part of the organism comes a disturbance of the balance in the work allotted to other portions. Tissues not specialised for the purpose are compelled to discharge the functions of those already damaged and perform them but imperfectly. The result is progressive enfeeblement of these overtaxed cells, until finally some function is so imperfectly performed that the life processes are blocked and the organism as a whole dies. Minot pointed out that in the mature cell the proportion of cytoplasm to nucleus is greater than in the growing animal, and on this ground he propounds, half humorously, the aphorism that "protoplasm is the physical basis of advancing decrepitude." We have reproduced the above sentences in a somewhat abbreviated form from Professor Donaldson's work, but they suffice to show that he writes well and clearly. Succeeding chapters deal with the increase in weight

of the entire body (in which the tables of Dr. Charles Roberts are taken as a guide, because, unlike those published in Denmark, Germany, Sweden, Russia, and the United States, they include the ages before four and after twenty, which are not given in foreign statistics since the latter deal only, or chiefly, with school children); with the weight, increase of different parts of the body, and increase in stature; with the weight of the brain and spinal cord, and the capacity of the cranium; with the histology of the nervous system; with the localisation of function in the brain; with physiological rhythms; with fatigue and old age; and with the education of the nervous system. This last chapter is a very thoughtful and suggestive one, and we are tempted to make a short extract from it. "It is extremely interesting," the author says, "to see how in a series of eminent men, excluding men of action, the determination of distinction follows the order in which the brain normally attains the high development necessary to command recognition in a particular profession. The manner in which the encephalon becomes organised shows that some combinations among the central elements are normally completed earlier than others. When, however, such sensori-motor connexions are once established the time required for their perfection is comparatively short. Further, it appears that high excellence, especially in the acts requiring simple sensori-motor combinations, is acquired speedily or not at all; and thus prolonged exercise, though it may have value as a moral training, is insignificant for technical improvement." Professor Donaldson gives a table from Sully which shows that amongst 287 men of eminence those who gave promise earliest, produced in their own art earliest, and distinguished themselves earliest might be ranked in the following order: musicians, artists, scholars, poets, men of science, novelists, and philosophers. The work throughout is very readable and constitutes a valuable addition to the series of which it forms a volume. It may be read with advantage by all engaged in the tuition of the young.

A Manual of the Practice of Medicine. By FREDERICK TAYLOR, M.D., F.R.C.P. Lond., Physician to, and Lecturer on Medicine at, Guy's Hospital. Fourth Edition. London: J. & A. Churchill. 1895.

THE rapidity with which new editions of a text-book are called for is unfailing evidence of its merits and its suitability to the student's needs. Of text-books in medicine there is indeed no lack, and therefore it is all the more gratifying to find that so comparatively a new-comer as "Taylor's Medicine" should have obtained within five years the distinction of a fourth edition. The author is to be congratulated on this practical proof of the popularity of his work—a popularity which is thoroughly well deserved. Nor has he been unmindful of the duty, incumbent on every teacher in these days of rapid additions to knowledge and changes in thought, to carefully revise his work, so that it may keep abreast of the times. He says in his preface that in the section on specific infectious diseases "I have endeavoured to represent the latest views and discoveries; and the questions of immunity, protective inoculation, and antitoxins have received attention." Space is also given to a fuller account of tropical diseases, whilst chapters have been introduced on Acromegaly and Mycosis Fungoides. And as another striking example of revision of medical opinion the "subject of appendicitis has been largely re-written." It would be a work of supererogation to submit this text-book to any detailed critical analysis. Its author is well known as an accomplished physician, and his teachings are evidently based upon wide clinical experience. The result of his labours is a work which can safely be recommended as a trustworthy and reliable guide to the principles and practice of medicine.

Surgery: its Theory and Practice. By WILLIAM JOHNSON WALSHAM, F.R.C.S. Eng., M.B., C.M. Aberd., Senior Assistant Surgeon, Lecturer in Anatomy, and Surgeon in charge of the Orthopædic Department, St. Bartholomew's Hospital, &c. Fifth Edition. With 380 Illustrations. London: J. & A. Churchill. 1895.

IN preparing the fifth edition of this work the author states that he has endeavoured to increase its usefulness by amplifying those subjects that seemed to require it and by describing many conditions and operations not mentioned in former editions. This, we learn, has been done without materially enlarging the book by leaving out such matter as, with the advance of surgical science and practice, has now ceased to be of value. The character of the type is improved and more illustrations are added; some of these are, however, superfluous, such as No. 269, the diagrams to show the lines of incision for the arteries of the extremities are useless, and No. 289 is a reproduction of No. 146. Altogether this edition is, however, considerably improved. We still hold that the true use of a book such as this is for men at the close of their student career, when, having firmly grasped surgical principles, they want to freshen their memories on the details of surgical injuries and diseases. It is not, in our opinion, well adapted for the student, in whose hands it is probably used as a "cram." We know that it is liked by the student from the frequency with which we see it carried about, but we regard it as inadequate to supply the knowledge required by one who is studying surgery as an important part of professional education. Our experience is that few students buy more than one book on surgery, and we contend that such a subject should be more fully treated than it can be in a volume of the size of this one.

Verhandlungen des Congresses für Innere Medicin. Herausgegeben von Dr. E. LEYDEN und Dr. EMIL PFEIFFER. Dreizehnter Congress. Wiesbaden: Verlag von J. F. Bergmann. 1895. (*Transactions of the Congress of Internal Medicine.* Edited by Dr. E. LEYDEN and Dr. EMIL PFEIFFER. Thirteenth Congress. Wiesbaden: J. F. Bergmann. 1895.)

ONE of the most interesting and most fruitful of the annual medical congresses that now so plentifully abound is that of "Innere Medicin," which for many years used to meet regularly at Wiesbaden. It always assembles in the spring of the year, and one of its chief features is the selection beforehand of two or three topics of current interest for general debate. The meeting last spring was at Munich under the presidency of Professor von Ziemssen, and the published volume of its Transactions contains much that is noteworthy and valuable. Thus the first day's subject was the Serum Treatment of Diphtheria, which was introduced by Professor Heubner of Berlin, and discussed by a large number of physicians from all parts of Germany. The next debate was on Iron in Therapeutics, opened by Professor Bunge of Basle and Professor Quincke of Kiel; whilst the third was upon the Pathology and Treatment of Typhlitis (*lit.*, the "typhlitides"), opened by Professor Sahli of Berne and Professor Helferich of Greifswald, who were followed by Dr. Sonnenburg, who gave a very instructive account of his experience of "Appendicitis Simplex." Many memoirs on subjects of more or less clinical importance make up the volume, which strikes us as being one of the most valuable and interesting that has appeared amongst the thirteen that have been published since the Congress was instituted. We may have occasion to refer again to some of these articles.

LIBRARY TABLE.

Circular Sewer Discharges. By a MUNICIPAL ENGINEER. London: The St. Bride's Press, Limited. 1895. Price 1*s.*—For the municipal and prospecting engineer this is an

indispensable table, in the form of a handy pocket-book, giving the discharge from circular sewers at different gradients, when running full, in cubic feet per minute. The figures are based on a calculation of the formula of Weisbach, in which the chief factors are head of water in feet, length of pipe in feet, diameter of pipe in feet, velocity in feet per second, coefficient for friction, and coefficient of resistance for entrance of water into pipe. Thus at a glance the engineer can get just the information he wants in regard to the capacity and flow of sewers when preparing new schemes of drainage.

Examination of Water for Sanitary and Technical Purposes. By HENRY LEFFMANN, A.M., M.D., Ph.D. Third edition, revised and enlarged, with illustrations. Philadelphia: P. Blakiston and Co. 1895. Price $1.25.—Since the issue of the first edition of this useful little work we have employed several of the processes described therein for the analysis of water in our own laboratory, with results which occasion us no surprise that in a very short space of time there has been a demand for three editions. The present edition has been revised entirely by Dr. Leffmann, his former colleague, Dr. William Beam, having left to reside in a distant part of the world. The book is quite in touch with recent progress, as is instanced in the observations on useful and worthless filters, while much of the text in the section on Biological Examination has been rewritten in harmony with modern notions. To the English reader its only blemish is its American orthography. The plural of sulphide is written "sulfids," and so on. That this system is not consistent, moreover, is evident from "chlorin" and "urine."

Elements of Modern Chemistry. By the late CHARLES ADOLPHE WÜRTZ. Fifth American edition. Revised and enlarged by WM. H. GREENE, M.D., and HARRY F. KELLER, Ph.D. Philadelphia: J. B. Lippincott Company. London: 10, Henrietta-street, Covent-garden. 1895.—The author of this volume was the editor of the well-known "Dictionnaire de Chimie," supplements to which, we believe, continue to be published. His knowledge had extended far into every branch of chemical science, and fresh facts, as they were brought to light from time to time, could hardly have escaped his notice. Had it been otherwise we should have been surprised to find that what is nowadays a really difficult task—namely, to include the whole of the leading and most important facts of both organic and inorganic chemistry, to say nothing of the treatment of the theoretical portion, within the convenient dimensions of such a volume—had been so successfully accomplished. But Würtz was not only a master of chemical science but a teacher and a writer, and we are glad that the simplicity of his own language has been preserved so far as the exigencies of translation would permit. The plan of treatment of the subject is old, but nevertheless good. The student must grasp the mathematics of chemistry and pass over the *pons asinorum* before he so much as handles a test-tube. Thus the laws of chemical combination and of definite proportions, the atomic theory, and the system of nomenclature are his first intellectual exercise. It is interesting to find a paragraph devoted to argon in the section on Air, giving a description of its preparation and properties. It is the first reference we have found in text-books to the newly discovered constituent of the air. While this affords evidence that care has been taken to include the latest advances in inorganic chemistry, we see the same fact brought out in the organic section, where space has been found for a description of the new antipyretics which organic chemistry has placed at the service of the physician, as exemplified in antipyrin, phenacetin, and thalline. Indeed, the section on Organic Chemistry is, consistently with the size of the volume, very fairly complete, and concludes with some excellent paragraphs on the alkaloids, albuminoids, albumins, biliary principles, and other bodies of physiological importance and of general medical interest. Würtz commenced as a student of medicine, and medico-chemistry was a subject of special interest to him. The book may be recommended as an excellent manual on chemistry for students of medicine to read in the earlier part of their curriculum.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE ordinary quarterly Comitia of the College took place on Oct. 31st, the President, Sir J. Russell Reynolds, Bart., being in the chair.

J. H. Dauber, M.B. Oxon., M. S. Löwenthal, M.D. Würzburg, E. S. Smith, M.D. Durh., and H. C. Thomson, M.D. Lond., were admitted to the Membership of the College.

Licences were granted to the successful candidates at the recent examinations of the Examining Board.

On the motion of Sir R. Quain the use of the library was granted to the General Medical Council for the purpose of its next meeting.

Two communications were received from the Colonial Office, one conveying a report on the sanitary condition of Hong-Kong, and the other enclosing a despatch from the Straits Settlements relative to the alleged discovery in Java of a supposed remedy for diphtheria.

A report was received from the University of Edinburgh awarding the Murchison scholarship to Mr. Neil Macvicar, M.B.

A communication was read from Mrs. Blenkins, widow of the late Deputy-Inspector-General Blenkins, offering for the acceptance of the College the collection of anatomical and pathological preparations which he had made, chiefly from specimens obtained in the Crimea. Mr. Blenkins in 1851 had received the thanks of the College for work done in its museum. The offer was referred to the museum committee for consideration and report.

Sir Dyce Duckworth briefly reported the circumstances of his representation of the College at Paris on the occasion of the State funeral of M. Pasteur.

The audited accounts for the year ending Sept. 29th were laid on the table, and reports from the finance committee, the committee of management, and the laboratories committee were received and adopted.

Dr. Ord was re-elected a member of the committee of management, and Dr. Pye Smith of the laboratories committee.

SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN.—In the recently issued statement of the Bristol branch of this society it is stated that since 1889 it has investigated 2200 complaints of cruelty in Bristol and the neighbourhood, affecting 42,000 children. In cases where the complaints were well founded, and this was generally the case, the offenders were warned, and then, if necessary, prosecuted. The actual number of prosecutions had been 300, and only 12 had been acquitted, this being below the average of acquittals of the society throughout the country. Up to the end of 1894 the number of cases investigated in this district exceeded that in any other district of England except London.

THE MEDICAL GUILD, MANCHESTER.—The quarterly meeting of the Medical Guild was held in the Victoria Hotel on Oct. 31st, Mr. Alderman Walmsley, J.P., being in the chair. At the previous meeting the Council of the Guild was asked to report generally on Provident Medical Aid. An interim report was now read, dealing with the Friendly Societies' Sick Clubs, Provident Dispensaries, and Medical Aid Associations. After discussion the report was referred back for completion, and ordered to be then printed, and a copy sent to each member of the Guild one month before the next quarterly meeting. On the motion of Dr. Brierley it was by a majority resolved that the council be instructed to draw up a scheme of provident medical aid on the basis of a wage and age limit, constructed on a sliding scale.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 9, 1895.

THERE is a general feeling throughout the profession in favour of a more strict enforcement of the principles and duties of medical ethics. The profession is crowded as it never has been before, and the temptation to resort to undignified and unprofessional methods is greater than it has ever been; but the general antipathy of medical men towards such methods continues, and is likely to continue. Our profession is not a well-organised one. Its great corporations are only beginning to realise their duties to their members. And the voluntary associations of medical men are still far from acting with that clearness and cohesion which are necessary to make an effective impression either on the profession or on the public outside. Progress, however, in every direction may be noted. At its last annual meeting the British Medical Association devoted quite an unusual amount of attention to such subjects. It imposed by resolution on its council the duty of approaching Government, the General Medical Council, Parliament, teachers of medicine, and others in support of measures for the better regulation of medical conduct. We do not pretend to know how far the council is giving effect to these resolutions; but it will be called to account if it does not soon give evidence that it is endeavouring to give effect to them. A still more satisfactory sign of the steady progress of the profession in regard to medical conduct and methods of practice is to be seen in the reports of our Special Commissioner from various important towns under the heading of "The Battle of the Clubs." The essence of all medical ethics is the recognition that the individual practitioner in the last resort is the custodian of the honour of the profession, and that he is bound to do nothing to tarnish it either personally or through the agency of bodies or societies. The unity and organisation of the profession in most of the towns our Commissioner has visited are altogether admirable. We can only desire to see this example followed in every town and in every country district. Neither the General Medical Council nor the medical corporations can help medical men who will not use their own local authority in an organised and dignified manner for the assertion of medical rights and in condemnation of those members of the profession who are willing to betray its general interests if they can gain a personal advantage.

If medical men will organise in their several localities they will be more respected by the public, and they will create an *esprit de corps* that will have the most beneficial effect on those who are tempted to forget that they are members of a liberal profession that deserves to be treated respectfully in a civilised and self-respecting community. They will, moreover, leave little to be done by the medical authorities in the way of vindicating medical ethics.

Still, it is of the first importance that these authorities should have full power of controlling their members whenever th ir conduct exceeds that which is incapable of correction by the expression of local medical opinion or of the larger voluntary associations of the profession. The Royal College of Surgeons of England has set an excellent example to the other corporations in obtaining the sanction of the Home Secretary to an alteration of its by-laws bearing on the misconduct of Fellows and Members. We have already alluded to this feature of the work of the College in the past year. But for the opposition of a certain section of the Members the College might have had a still more powerful by-law. The incident shows how much stronger the College would be if it would meet the reasonable wishes of the Members for a modest representation on the Council. This demand cannot be long refused, and the sooner it is granted the more it will be appreciated. The concession of the just claim of representation would, we are convinced, add immensely to the strength of the College. Of all duties which the Council owes to the Members this is the greatest—to recognise their claim to a certain voice in the governing body. The College has set an example to all the medical authorities in making clear its own ethical powers by having them defined in a by-law that meets the approval of the Home Secretary. We call upon the other medical authorities to take note of this fact. But we look confidently to the Royal College of Surgeons of England for one example more for a due recognition of the claims of its own Members to a share in all the functions of the College. This step would initiate a harmony and a power in the profession hitherto wanting, and would secure for it the greater respect of statesmen and the public.

WE have already, in noticing the Report of the Sanitary Commissioner with the Government of India for 1893, touched upon a number of points that are embodied in the Report to Parliament on Sanitary Measures in India during 1893–94. But the number and importance of the subjects included in the Blue-book issued from the India Office a few months ago well entitle them to further consideration. Notwithstanding what has been said to the contrary, and in spite of the fact, as it seems to us, that Indian reports are too numerous and voluminous and too complicated and full of statistical tables to enable people to get at the information they really require, we hold that some of them are very ably compiled and valuable. It must be borne in mind that they are prepared for the information of Parliament and not for the special edification of the medical profession and *savants;* they deal with results and vital statistics, and not with scientific theories and hypotheses, except in so far as these have been made the basis of some legislative action and financial expenditure. The reports of the late Dr. BRYDEN, for example, quite apart from the correctness or otherwise of any generalisations or hypotheses he may have put forward, were in his day models of the way in which most valuable information could be condensed and rendered in tabular form. Instead of vague guesses about diseases and deaths in relation to climate, age, length of service, and many other points, they gave a foothold of facts and figures which enabled

the Government of India to calculate beforehand what they had to expect under given conditions and environments. This is, and must always be, one of the main objects of reports prepared for the information of official bureaux charged with the responsibility of practically forecasting the probable cost and results of political measures and departmental proposals. Nor are Government and other official reports invariably altogether devoid of scientific and literary interest. Some notice is generally taken of the prevailing view or doctrine of the day in relation to the facts and figures set forth. The report on the last census of India, to cite an example, was one of the most learned and interesting public documents that has ever been published. We have introduced these remarks with the object of pointing out that there is a point of view which is apt to be lost sight of—namely, the financial and administrative one—from which Blue-books must be regarded. We are far from saying that they are at any time a form of light literature, or that they are not capable of much improvement in the way of arrangement, clearness, and condensation, but they were not, it would seem, designed for the progress or elucidation of science or the diffusion of information regarding the results of modern scientific researches.

Turning, however, to the *précis* of the sanitary measures in India recently issued by the India Office we find that the health of the European army in India during 1893 was, on the whole, more satisfactory than in the previous year, save that there was a small increase in the daily sick-rate. The death-rate in an average strength of 70,091 was 12·61 per 1000; the loss by invaliding was 25 per 1000. Of the three armies in India that of Bengal was the most unhealthy. The chief causes of sickness in the whole European army were, as in the previous year, venereal diseases and ague. The chief cause of mortality was, as usual, enteric fever, which gave rise to 42 per cent. of the total deaths, or 5·29 per 1000 of the strength, as compared with a death-rate of only 0·04 per 1000 in the large native army. There were only sixteen admissions due to, and ten deaths from, cholera in the whole army in 1893. Among the general population cholera was also remarkably quiescent during 1893, the death-rate from this cause being the lowest recorded for some years, and showing a decrease of 507,188 on the deaths recorded from this disease in 1892. This fall was general almost all over India, and it forms a very striking and interesting fact. Under the head of "Fever" the deaths among the native population were enormous. The fevers were no doubt mainly of a malarious type; but there can be no doubt also that a very large number of deaths from other diseases are registered under this head. Brigade-Surgeon-Lieutenant-Colonel W. H. GREGG states that after an experience of twenty-two years spent in the study of the health of the people of Bengal he has no hesitation in saying that the crying want of the province is improved drainage, and that without it the death-rate from malarious fever will go on increasing. The Drainage Bill which is now before the Bengal Legislative Council he regards as being conceived in the truest and best interests of the people, and he adds a hope that nothing will prevent it from passing into law.

We may also add our hope that the Government of India will not lose sight of the scientific aspects of the problems that press for investigation in the medical history of a country, which affords an almost unique field for bacteriological researches. Mr. HANKIN'S labours in this respect have already been fruitful of results, and have given a precision to the various points that remain for further inquiry. We trust that bacteriological laboratories and scientific investigators will be multiplied in India and nothing be left undone to discover and remove the causes of such diseases as enteric fever, for example, which is so fatally prevalent among our young troops serving in that country. Recent views and researches have given a great impetus to the study of the causes of disease. Without a fairly accurate knowledge of what these really are it is scarcely necessary to say that our efforts to eradicate or diminish them must be futile. But all Government officials have probably a keen eye to practical results. The discovery of a specific bacillus as the essential cause of a disease is of great importance and scientific interest, but the matter does not end there, as if everything could be relegated to that discovery. The root of the matter lies in the practical outcome and application of such discoveries. What can an official do, and how is he to justify his action and the expenditure of public money to the men of culture and education, and of sound judgment perhaps, but with no special knowledge or technical training, with whom he has to deal? It is only fair to say that a great amount of work has been done and vast changes for the better have taken place in India, especially considering the poverty of the people and their aversion to all change or interference with their habits. Those who have had the best opportunities of knowing what the progress has been and the great difficulties which sanitary work in India has to contend against do not at all agree with the representations that have been lately put forward in this country; on the contrary, they regard them as unjust alike to the Indian Government and its medical services.

IT is not to be wondered at that the public have taken an intense interest in the issue of what has been called "the LANCHESTER case." At the South-Western Metropolitan Police-court on the 26th ult. Mr. SULLIVAN, a working man, who is described as a member of the Battersea Social Democratic Federation, asked Mr. CLUER, the magistrate, for his advice. He said that he was engaged to be married, and the ceremony was to have been performed that day, but the parents of the lady objected to the alliance because she did not intend to conform with the present marriage laws. In reply to the magistrate the applicant said that they were not to be married at a registry office, as they did not believe in the marriage laws as at present constituted; he added that he had been informed that the lady was forcibly removed to an asylum by her friends. The lady referred to is Miss EDITH LANCHESTER, who is twenty-four years of age and of good birth, position, and education. She is a well-known Socialist, and was a candidate at the recent School Board elections. It appears that she had been removed from the house where she was living upon a certificate of insanity granted by Dr. FIELDING BLANDFORD, who had been consulted by her father and brothers, who said they

thought she was not in her right mind. According to Dr. BLANDFORD'S statement, Miss LANCHESTER declared in his presence that she would live with Mr. SULLIVAN, that it was right to do so, and, in answer to a question, said she would not marry him even if he would marry her. She could give no reason for this conduct beyond saying that marriage was immoral. Dr. BLANDFORD states that he came to the conclusion that Miss LANCHESTER was of unsound mind for the following reasons: "I was informed that there was insanity in her family, her grandmother and an uncle having been insane; that she had always been eccentric, and had lately taken up with Socialists of the most advanced order. She seemed quite unable to see that the step she was about to take meant utter ruin. If she had said that she contemplated suicide a certificate could have been granted without question. I considered I was equally justified in signing one when she expressed her determination to commit this social suicide. She had a monomania on the subject of marriage, and I believed that her brain had been turned by Socialist meetings and writings, and that she was quite unfit to take care of herself." After a few days' detention in a private asylum Miss LANCHESTER was released upon the order of the Lunacy Commissioners who visited her and had an interview with her. Her opinions on the marriage question (she says) have undergone no change by her detention in the asylum; if anything, she holds to them more firmly than before.

This dramatic story has in it much of the serio-comic element. The man who wished to be married without marriage, and the woman who would not be married if she could form strange figures in our everyday real life; and they serve to illustrate the lengths to which ill-advised "morality" doctrines of the Socialistic type would impel young persons who are in other ways harmless and well meaning. On the other hand, the story brings us face to face with the question whether the persons thus indoctrinated are to be prevented from carrying out in practice the resulting social *modes* of their "morality" by authoritative restraint in asylums on the plea of insanity. The curious part of it is that we are unable to point to a player who is doing the part of "villain" in this tragi-comedy; for we believe that all the performers carried out their respective *rôles* with absolute *bona fides*, from the girl herself at the commencement to the Lunacy Commissioners at the finish. This fact, to our mind, simplifies the task of criticism and enables us to look calmly and deliberately at the main circumstance in the case after the first fervour of a needless public excitement has passed away.

When a man of Dr. BLANDFORD'S high position, great experience, and professional and personal uprightness gives his certificate of insanity, that certificate can be called in question only under circumstances of a very exceptional character. Looking at this case in all its bearings, we venture to regard the circumstances as, in themselves, almost unique; and if, therefore, in what is practically a test case, we feel that we are unable to agree with Dr. BLANDFORD as regards the necessity for the certification and immediate removal of Miss LANCHESTER to an asylum, it is largely due to the fact that we have had more time to consider the bearings of the question; while, on the other hand, we are bound to admit that we have not had, as Dr. BLANDFORD has had, the important advantage of completing our knowledge of the case by an interview with the young lady and of hearing her speak for herself. If any right-minded young lady of our acquaintance who had been carefully and religiously brought up were suddenly to proclaim the doctrine that marriage is immoral and to insist upon living with her father's coachman, we should have some difficulty in certifying her to be of sound mind. Indeed, we should naturally regard her as having "gone off her head" and should look for other indications of insanity; and, finding these, we should probably have her medically cared for and looked after. But when this doctrine represents the teaching, however preposterous, of a society or group of individuals, however insignificant, and when its logical outcome in practice brings up the question of the person's sanity for decision, as in Miss LANCHESTER'S case, we hold that a certificate of insanity and consequent removal to an asylum are not warranted or justified either on the ground of public safety or with a view to the earliest proper treatment of the mental condition. The point which Dr. BLANDFORD makes as to certification being equally justified whether the suicide determined upon is actual or merely social is not conclusive, because we have a right to use more forcible and extreme measures to prevent a person attempting to commit suicide, which is a criminal and punishable act, than we have to prevent a woman living unmarried with a man, however suicidal socially it may be for her to do so. If at the first blush of a case of this sort we might have been disposed to think with Dr. BLANDFORD that, so far as Miss LANCHESTER was concerned, the end justified the means, further reflection and the actual result show that the course pursued was not the best one, for the lady's mental state has not been improved, nor is it likely that prolonged and indefinite detention in an asylum would have altered her convictions. The far-reaching importance and relationships of optional and obligatory morality in regard to our individual and social life could not be more strongly evidenced than in this case; and we feel that medical men have a very heavy responsibility upon their shoulders in guiding unstable and eccentric members of the community through life successfully and without mishap. This responsibility becomes intensified in proportion as deviations from the normal in conduct stretch away towards positive insanity.

THE REPORT OF THE COMMITTEE ON PRISONS.—The annual report of the Howard Association, 5, Bishopsgate Without, E.C., contains some not altogether favourable criticism of the Report of the Committee on Prisons, full notices of which appeared in THE LANCET of May 4th, 18th, 25th, and June 15th, 1895. The association is especially opposed to the committee's recommendation that the isolation system should to some extent be relaxed. The committee were of opinion that the tread-wheel and other deterrent influences should be abolished, but in the absence of these it becomes the more necessary that cellular separation should be rigorously maintained. The committee, moreover, recommended associated labour, of course with due regard to classification. It is asserted, however, by some authorities that any associated labour, though apparently profitable in a financial sense, invariably results in the less hardened offenders becoming hopelessly deteriorated.

Annotations.

"Ne quid nimis."

FILTHY ICE-CREAMS.

THE report of THE LANCET Special Commission on the Sanitary Condition of the Italian Quarter, published nearly twenty years ago,[1] showed under what loathsome conditions ice-creams were made, and might have enabled any intelligent person to predict with certainty the exact species of organism which would be found probably in millions in a pennyworth of ice-cream on bacteriological examination. Is it, to take one example, at all surprising that the bacterium coli commune, the constant inhabitant of the human bowel and ever present in sewage matters, is found in ice-creams when we learn from our Commissioner's report that the mixture is made in filthy backyards or in dark cellars where it is exposed to foul emanations, gaseous, liquid, and solid, where the floor spaces oftentimes cannot be crossed except by boards, which in some instances sink suddenly into the sludge oozing from a defective drain beneath and splashing the malodorous mixture into any receptacle that may be near? We leave out the very questionable character of the materials employed in making ice-creams; they were bad enough, as our Commissioner saw, in some of the houses of the Italian quarter in London. Rotten eggs, bad flour, and repulsive-looking milk, all excellent pabula for the disease germ, are often, it is to be feared, the ingredients of the ice-cream compounder's recipe. The numbing effect of the ice upon the palate coupled with the sweetness of the sugar is an effectual disguise to the disagreeable taste of these ingredients. Bacteriological examinations of ice-creams have been made from time to time and more recently by Dr. Klein, whose report was discussed in THE LANCET of Oct. 13th, 1894. A fresh and a very exhaustive inquiry has just been completed by Dr. Macfadyen of the British Institute of Preventive Medicine and by Mr. Colwell, F.I.C., which should deal the death-blow to an evil unchecked and secure the prompt assistance of the Legislature to place these disease-breeding grounds under the control of the law. The average chemical composition of an ice-cream according to these investigators is as follows: total solids, 26·5 per cent.; fats, 4 per cent.; sugar, 12 per cent.; starch, 6 per cent.; albuminoids, 4 per cent.; and mineral matter, 0·5 per cent. Microscopical examination revealed the following delectables: bed bugs, bugs' legs, fleas, straw (bed?), human hair, cat's and dog's hairs, coal dust, woollen and linen fibre, tobacco, scales of epithelium, and muscular tissue. Could the list be more complete in absolute confirmation of our Commissioner's observations on the filthy environment under which they found ice-creams being made? ("The rooms contained as many double beds as could be got into them; there were no washstands, no basins, no towels—nothing but beds with very scanty, filthy, black bedding swarming with vermin."—*Vide* THE LANCET Commission, THE LANCET, Oct. 18th, 1879, page 590.) Shop samples were, as a rule, better as regards their bacterial contents than the street-barrow supplies, the maximum number of organisms found in the former being just over a million per cubic centimetre, and in the latter seven millions. The water used in making the creams teemed with micrococci, bacilli, and spirilla, one sample containing over five million bacteria in one cubic centimetre (about twenty-five drops). Putrefactive microbes were constant inhabitants, and so on *ad nauseam*. The results are too highly disgusting to need further comment, or to require at our hands any other remark on the urgent need for agitation for the immediate interference of public authority in this matter.

[1] THE LANCET, Oct. 18th, 1879, p. 590.

THE REMUNERATION OF MEDICAL WITNESSES AT ASSIZES AND SESSIONS.

IT will be remembered that early in the year a deputation from the United Kingdom Police Surgeons' Association waited upon Mr. Asquith, then Home Secretary. Their object was, *inter alia*, to show him how inadequately medical men were remunerated for their services as witnesses at all courts of law, but more especially when attending at assizes and sessions held in towns and cities distant from those in which they lived. It may also be remembered that Mr. Asquith courteously received the deputation, heard all they had to urge upon him with most exemplary patience, and conceded that the existing remuneration was not sufficient. But he frankly admitted that as his predecessors in office had declined to make any change, although their attention had been frequently called to the matter, he felt equally unwilling to burn his fingers. He suggested that in the case of police surgeons those bodies which appointed them should take the matter into consideration when fixing the salaries. This would still leave untouched the case of medical witnesses who are not police surgeons, and who comprise probably the larger proportion of medical witnesses. Moreover, the suggestion made by Mr. Asquith can hardly be regarded as either feasible or fair. Assize and sessions cases do not come with mathematical regularity, but in a very uncertain manner, and too often at the most inconvenient time. It would be impossible to fix such a salary as should fairly make up the deficiency of fees for attendance in such cases. Besides, it is obviously more just that the borough or county authorities who require the attendance of the medical witness should themselves remunerate him. It is the intention of the same Association to wait upon the present Home Secretary early in the ensuing year and to urge the importance of the matter upon him. The present autumn assizes will certainly furnish many cases illustrative of the hardship endured by medical witnesses, who so far from being remunerated are barely able to pay expenses while absent from home, and are not infrequently actually out of pocket. Full details of any such cases should be sent to the secretaries of the Association, Mr. F. W. Lowndes of Liverpool, and Mr. H. Culliford Hopkins of Bath.

SHOULD PATIENTS SMOKE?

DR. JANKAU, in an article in the *Zeitschrift für Krankenpflege*, tries to answer the question so often asked by patients and convalescents: "May I smoke, Doctor?" As a general rule there is no need to forbid the use of tobacco in surgical affections and during convalescence after operations, with the exception of those on the eyes, the abdomen, and the bladder. Does the use of tobacco play any part in the pathology of cancer of the lips and of the tongue? Nothing certain can be said on this point. It should be forbidden as a general rule in affections of the throat and of the pharynx, and with certain restrictions in catarrh of the naso-pharynx. The toxic action of tobacco must not be forgotten, and those suffering from internal affections should only be allowed to smoke with circumspection. Fortunately, however, most of the affections in which the use of tobacco is injurious are just those which cause the patient to dislike it; indeed, attention is often drawn to the fact that a man is unwell by his evincing a disinclination for smoking. Therefore, it is occasionally a good sign when the convalescent again feels a desire to smoke. Tobacco should be strictly forbidden in cases of peritonitis, typhlitis, and perityphlitis. According to Dr. Jankau gastric affections

should not be considered an absolute counter-indication. Patients who suffer from organic affections of the heart cannot generally tolerate tobacco with any ease; nevertheless, a habitual smoker may be allowed two or three mild cigars daily. As to pulmonary affections, experiments have taught us the prophylactic and even bactericidal action of tobacco on the micro-organisms of the mouth and those of carbuncle, of typhoid fever, and pneumonia. The same effect of tobacco is seen in the case of the bacilli of tuberculosis. He also considers that it is a great mistake not to allow those in the first stage of phthisis to smoke; on the contrary, he would encourage them to do so even more than formerly. There are two other points in favour of tobacco—its disinfecting qualities on the mouth and the soothing effect exercised by it on the genital functions, which at the beginning of tuberculosis are very excited. Moreover, tobacco has a favourable influence on the central nervous system, both on account of its slightly narcotic action and by distracting the patient's thoughts from himself and his illness to his smoking and the associations which it brings with it. It is most important that phthisical patients should be prevented from continually thinking of themselves and their malady. Tobacco need not be absolutely forbidden even when hæmoptysis exists, if only it is but slight. With regard to functional affections of the nervous system, it would not be advisable absolutely to forbid smoking from the commencement of the disease. The medical attendant should, however, be careful to state plainly the number and quality of cigars which may be smoked, and to ascertain as far as is possible whether the patient adheres to the directions given. In nervous affections of the heart it is most important that the greatest care should be exercised, and this is also the case with nervous dyspepsia. In fact, the use of cigarettes, however mild, may in the latter lead to very serious consequences. In organic affections of the nervous system great caution is requisite. Permission to recommence smoking during convalescence should only be accorded after a thorough examination, and the patient should be advised to act with great caution in this matter. In all cases both the quality and quantity of tobacco should be rigorously supervised and its consumption only allowed to increase gradually. He is very sceptical with regard to the so-called hypnotic property of tobacco; according to him this is nothing but a theory. Finally, he doubts the justice of the view held by the majority of people with regard to the good effects of cigars after meals. He advises that a small quantity of milk should be swallowed from time to time while smoking. This is especially desirable for patients or for those who are convalescent.

STREET NOISES.

THE Balloon Society have come down from the empyrean to the consideration of a very earthly and singularly annoying subject. At a recent meeting Mr. Charles Fox read a paper and laid a draft Bill before the meeting. This Bill, which we earnestly hope will pass, provides for the registration of itinerant musicians when British subjects, and their licensing when foreigners. There are other clauses dealing with the distance from any building within which playing should be allowed. Street music is bad enough, but an even more aggravating disturbance is caused by the hordes of howling sellers of newspapers. The halfpenny papers are the chief offenders, and if the Anti-Gambling League want to win popularity let them back up Mr. Fox's Bill, and insert a clause to the effect that anyone who yells "winner" in the street ought to be instantly arrested and his papers confiscated. On Sunday morning the noise is even worse than on a week-day, and the nuisance in certain parts of London is intolerable. We have not the slightest objection to Sunday papers *per se*, but no one should be allowed to cry them. Other noises made by costermongers, the sellers of coal, who moan like the old drivers of the plague carts, bands and the idiots who try to blow post horns on omnibuses, the Salvation Army and other itinerant preachers, demonstrations in aid of hospitals, and street collectors of all kinds should be rigorously put down. It is all very well to cant about the blessings of freedom, the birthright of every Englishman to earn his own living, and so on, but the freedom to earn one's living by annoying other people ought not to be allowed for an instant. In this matter the much-abused Russia is far more free than England. The traveller who walks through a Russian town is never pestered by newsboys, street collectors, or other plagues. The City is a portion of the metropolis comparatively free from nuisances of this description, and we cannot see why the rest of London should not be made equally quiet. We have referred to the subject upon previous occasions,[1] and shall continue to protest upon every opportunity, until freedom to annoy their fellow citizens is taken away from those who have the power to do so.

POISONING BY CREOLIN.

IN No. 41 of the *Deutsche Medicinische Wochenschrift* Dr. Pinner, physician to the Jewish Hospital in Hamburg, reports the case of a woman sixty years of age who had attempted suicide by swallowing seventy-five grammes of creolin. It was at first not known which of the preparations called creolin had been taken, but the druggist from whom it was purchased subsequently stated that he only sold Pearson's. The woman was found unconscious in her room and was taken to the hospital two hours after the attempt on her life. She was then comatose, with livid face, moist skin, and blue lips; her right pupil was larger than the left, and there was no reflex action of the cornea. Her temperature was 36·6° C., her pulse 112 and regular, and her respiration deep and snoring, with tracheal râles. In the pharynx there was a large quantity of white mucus; the palatal arches and the posterior wall of the palate were covered by a grey superficial coating. There was a strong smell of creolin in the breath. By the stomach-pump 300 grammes of a thick grey fluid mixed with mucus were withdrawn, and pressure on the pylorus caused thick brown dróps of pure creolin to come through the tube. The first urine (150 grammes) was of a light-yellow colour, without albumin, sugar, or indican; the bromine-water test showed traces of tar acid in it. Microscopical examination revealed nothing abnormal. Milk given through an œsophageal tube was immediately vomited, but was eventually retained. An hour after admission into the hospital there were well-marked symptoms of shock, for which injections of ether were successfully made. There was also copious diarrhœa, and the stools had an odour of creolin. Some hours later the patient regained consciousness and afterwards became better. She complained of severe pain in the epigastric region and in the pharynx. The urine (80 grammes) was now of a dark-green colour, had an odour of creolin, and contained traces of albumin; by the tribromophenol reaction it was estimated that 7·5 c.c. of tar substances were present in 100 c.c. There was no hæmoglobinuria, and only a small quantity of leucocytes and red corpuscles and some casts. The patient slept very well during the first night, and on the following day there was an obvious improvement, the pulse, temperature, and respiration being normal, although she still complained of headache, want of appetite, and hoarseness, and an erosion on the epiglottis and the arytenoid

[1] THE LANCET, May 4th, June 8th, and Aug. 24th, 1895.

cartilage was observed with the laryngoscope. On the fourth day there was more diarrhœa, the stools still smelling of tar products. The urine continued for a week to be of a green colour and contained ½ per cent. of albumin, with much indican. After four weeks the patient was able to leave the hospital in perfect health and did not show any trace of injury from the poisoning. Dr. Pinner states that this is the seventh case of creolin poisoning described in medical literature, and that it was remarkable for the extremely severe symptoms which appeared almost immediately after the poison had been swallowed. Creolin, he says, used to be considered harmless because it could not be absorbed by the stomach, but in the above case the gastric juice very soon transmuted the creolin into a form which very quickly passed into the circulation and appeared after two hours in the urine. It was very remarkable that the urine of the first four days, even when kept in open glasses, showed neither any growth of bacteria nor any putrefaction, and the normal development of bacteria after exposure to the atmosphere occurred only in the urine passed on and after the fifth day. Dr. Pinner therefore suggests that the internal use of creolin may, perhaps, be useful in bacterial diseases of the genito-urinary system such as pyonephrosis, cystitis, &c. As it also checked fermentation in the bowels, perhaps intestinal derangements attended by extreme fermentation may be successfully treated by creolin. Notwithstanding the alarming symptoms of the first few hours, the patient very soon recovered, the creolin being obviously removed by the kidneys, which, though disordered for a short time, did not sustain any permanent injury. Creolin, therefore, according to Dr. Pinner, must be regarded as a comparatively innocuous substance. Another case of alleged creolin poisoning is reported by Dr. Gras of Vilshofen in the *Blätter für Gerichtliche Medicin*. A tuberculous woman thirty-five years of age was treated on the sixth day after confinement with vaginal irrigations of 3 per cent. creolin solution on account of fetid lochia. After the third irrigation the patient suddenly became collapsed and lost consciousness, the extremities being cold, the pulse feeble, and the respiration shallow; but injections of camphor and other restoratives were very soon followed by recovery, and no traces of carbolic acid were found in the urine. It seems rather doubtful whether these symptoms were due to creolin poisoning or were merely the effects of shock occurring in a woman weakened by childbirth and tuberculosis. There were no positive toxic symptoms, and the quick recovery makes it probable that the seizure was not really due to poisoning.

TRADES AND THE WEATHER.

EVERYONE will remember *Mr. Punch's* picture of the depressed sandbag vendor on a warm day. "No trade?" "No. Lord send us a real crool east wind, that's wot we wants." Another trade, somewhat more aristocratic than the one we have referred to, insomuch as it trenches upon the medical profession, is the cough-drop trade, and it, too, is dependent upon weather, being "quiet" when fine and "booming" in a "Kaffir"-like manner (we like the strictly commercial style) when good foggy weather comes. Such were the arguments put forward by a Mr. Hemming summoned for not paying his gas bill; the weather had been fine, trade had been bad, consequently he could not pay. The cough-drop of the summer, it appears, gives place to the "paregoric tablet" of the winter, cough-drop apparently being too familiar an expression to impress the average buyer. Among a certain class it is used as a term of affection or opprobrium, we are not certain which—e.g., "the Battersea cough-drop," as a certain M.P. was called the other day. Paregoric tablets, we presume, have a small quantity of opium in them, and it is to be hoped that mothers will not give babies too many of them, for the corner of the handkerchief through which the delicacy is sucked, though it keeps out the dust which has settled on the tablet from the street, will not keep out the opium.

PROSECUTION OF A MIDWIFE.

WE learn that the Superintendent Registrar of Merthyr Tydfil recently summoned a midwife for making a false statement as to the birth of a child. She had declared that it was stillborn, but medical and other witnesses proved that it had lived for some hours and that death resulted from suffocation. She was found guilty and fined £2 10*s*., with the alternative of a month's imprisonment. In the course of the proceedings it was mentioned that the coroner had informed the Registrar-General that, in his opinion, offences of this description were not uncommon in the district. An almost precisely similar case which occurred in Battersea was recorded in THE LANCET of Dec. 1st and Dec. 8th, 1894, and the prosecution initiated by the coroner resulted in the infliction of a fine. It is satisfactory to find that the authorities are prompt to use all the means in their power for the repression of this offence, which is so full of peril for infant life, and the commission of which is so much facilitated by the non-registration of still-births.

PARACENTESIS OF THE SPINAL THECA.

PROFESSOR QUINCKE of Kiel was the first to advocate and practise puncture of the spinal sheath in cases of cerebro-spinal meningitis, whether tuberculous in origin or not. This simple expedient has, however, not been much practised elsewhere, and in many cases has not been followed by permanent results. It is obvious that if it is to be of use in tuberculous meningitis the case must be one in which no other region or organ is the seat of miliary tubercle, and that may explain the fact of failure to ensure recovery even after a marked improvement as regards the cerebral symptoms, such as disappearance of coma, has followed the lumbar puncture and drainage. In a paper read before the recent meeting of the Association of German Naturalists and Medical Men (*vide* THE LANCET, Oct. 19th, 1895) Professor Quincke laid stress on its value in diagnosis. He affixes a manometer to the trocar and thus measures the degree of pressure within the canal. Failure to secure a flow of fluid is to be attributed to imperfect performance of the puncture—e.g., the passage of the needle between the nerve roots outside the sheath, or the presence of thick pus which will not flow through a too fine needle. He is convinced of the therapeutic value of the plan, especially in rapidly developing forms of acute serous and sero-purulent meningitis. Professor Quincke announced that one of his assistants was preparing an account of the experiences of his clinic on the method for publication in the *Archiv für Klinische Medicin*. Professor von Ziemssen said that there has been ample confirmation of the reports as to the diagnostic and therapeutic value of the lumbar puncture since its introduction by Professor Quincke. He himself had injected a weak solution of iodine into the canal by this means. He did not use a trocar, but a simple Dieulafoy's needle. Sometimes the patient, shrinking at the moment of puncture, approximated the vertebræ and thus hindered the entrance of the needle, and he thought that anæsthetics should be given in the case of adults. No reaction followed, and in some cases examined after death no trace of the puncture could be found. In acute cerebro-spinal meningitis, which occurred sporadically in Munich, he had seen good result, as well as in serous spinal meningitis. It was surprising that in uræmia, in spite of the high arterial pressure, only

a few drops of fluid are to be found in the cerebro-spinal sac. Dr. Lenhartz had done lumbar puncture in fifteen cases, of which three were cerebro-spinal meningitis. In several cases there was no result, although the needle undoubtedly entered the vertebral canal. In one case, ending fatally after two days, 80 c.cm. of slightly sanguineous fluid escaped. The puncture was without any effect in this case on consciousness, pulse-rate, &c. Only once had he found tubercle bacilli in the fluid, and in another case the tuberculous nature was proved by inoculation experiments. In one instance, after the escape of 100 c.cm., the patient grew worse. Professor von Ziemssen said that in severe cases the patients will always die. Exceptions cannot disprove the rule. In many cases the favourable course was certainly to be ascribed to the puncture.

CHOLERAIC AND DIARRHŒAL FATALITY IN GRIMSBY.

SOME time back the corporation of Grimsby complained somewhat bitterly of announcements of deaths in connexion with cholera in their borough. We are well aware of the fact that the term cholera as used by the Registrar-General in his quarterly returns does not necessarily imply Asiatic cholera; but when we look at the deaths which occurred in the Grimsby sub-district—which, in addition to Great Grimsby, includes Cleethorpes and some rural area—we find enough to justify the gravest apprehension as to what has been going on there. In the quarter ending Sept. 30th last 124 deaths were registered from diarrhœa, 22 from "cholera," and 10 from "fever." These are the headings of the Registrar-General's return. They indicate a very grave loss of life and call for some public explanation as to what this serious fatality was due to, and also whether the causes of it were exceptional and temporary or whether they are permanent.

PRACTICAL DISINFECTION OF ROOMS.

THE frequency with which second and third cases of scarlet fever appear in houses that have been disinfected by the inspectors of sanitary authorities casts grave doubts on the efficiency of the procedure usually adopted, despite its official sanction. Stripping the walls, lime-washing walls and ceilings, and scrubbing wood-work and floor-boards with soap and water are indeed effectual enough, and to these when thoroughly done we are disposed to ascribe any successful results rather than to the more technical process of so-called disinfection by sulphur fumes, which is little better than a superstitious rite or incantation shorn of the religious character it had in the mind of Ulysses when he "fumigated" the halls desecrated by the massacre of his wife's suitors after removing the corpses and washing away the blood with a promptness that precluded all thought of other than moral pollution. But in the light of bacteriological experiments dry sulphurous acid fumes, whether generated by burning sulphur or carbonic sulphide, or, as has of late become the fashion, by opening cylinders of the compressed gas, are for all practical purposes useless. The gas would act as a fairly powerful germicide on articles or fabrics previously saturated with water, but its bleaching action precludes its employment in this way with coloured materials, carpets, or curtains, and it is as what is called an "aerial disinfectant" that it holds its ground in popular esteem. But aerial disinfection is an absurdity; no one wants to purify the foul air, which is easily enough removed by simple ventilation. In disinfecting a room the true aim is to kill the germs contained in the dust on ledges or in the crevices between the boards, or adhering to the walls and other surfaces, and the dry gas is powerless for this, which is best attained by a sublimate solution of the strength of 1 part in 1000, or by lime (not white) washing, provided the lime be fresh burnt and caustic; the carbonate or chalk used in white washing under the name of whiting, and into which lime is converted by long exposure to the air, being inert. The series of experiments on the infection and disinfection by various means of wall papers, distempers, and other wall surfaces conducted by Dr. Cronberg, under the direction of the late Professor Uffelmann at Rostock, showed that subsequent scrapings were invariably and almost instantaneously sterilised by washing or spraying with the sublimate solution, and equally so by lime-wash after the lapse of twelve to twenty-four hours. The danger of corrosive sublimate is, we believe, exaggerated, for the smallest fatal dose for an adult being probably three to five grains—equal to at least a quarter of a pint of the solution—*accidental* poisoning with the solution is practically not probable, and as a further safeguard it might be coloured with indigo or "laundry blue." Carbolic acid, which is sold without restraint and is in universal use, is more dangerous on that account, and is, indeed, frequently employed with suicidal intent and with fatal effects. In France, Germany, and Italy sublimate has nearly superseded all other disinfectants, and its neglect in this country is inexplicable. As to carpets, curtains, bedding, and clothing, all that is capable of being washed should be plunged in a copper of boiling water for a quarter of an hour and such articles as would be spoiled by this treatment should be disinfected by steam.

COLD BATH TREATMENT OF TYPHOID FEVER.

THE treatment of typhoid fever by the cold bath method has been written on over and over again. It has been proved to be a most valuable one in many cases, and consequently just comments and further record of cases should be duly welcomed and considered. In the *Philadelphia Medical News* of Oct. 12th, 1895, a paper on the subject appears by Dr. Osler, giving his five years' experience with the cold bath treatment of typhoid fever. He states that during the first year of the hospital service typhoid fever was treated symptomatically. The number of severe cases admitted was unusually large, and there were eight deaths among thirty-three patients—a percentage of 24·2. For the past five years ending May 15th, 1895, systematic hydro-therapy had been used—the method of Brand, with certain minor modifications. Each patient received a tub bath of twenty minutes at 70° F. every third hour when the rectal temperature was at or above 102·5°. Frictions were applied in the bath, and a warm drink or stimulant given afterwards. The following are the general statistics given by Dr. Osler:—Cases admitted during the six years ending May 15th, 1895, 389; number of deaths, 34; percentage of mortality, 8·7. Cases admitted before the introduction of hydro-therapy, 33; number of deaths, 8; percentage of mortality, 24·2. Cases admitted since the introduction of hydro-therapy, 356; number of deaths, 26; percentage of mortality, 7·3. Number of cases bathed, 299; number of deaths among the bathed cases, 20; percentage of mortality in the bathed cases, 6·6. The percentage 7·3 represents the total mortality during the past five years, but as it does not represent the true mortality of the cases treated by hydro-therapy the figures must undergo a further analysis. Many circumstances interfere with the systematic carrying out of the plan which Dr. Osler pretty fully criticises. We have not space to give more than the smallest sketch of his remarks, but the original paper will well repay perusal. In the first place, a number of cases are admitted in the second or third week with a falling temperature; such cases are not bathed. In the very mild cases, also, seen more frequently in private than in hospital service, the baths are unnecessary. In the second place, some patients are admitted late in the disease and are too ill to be bathed. Thirdly, there is a group of cases

which present serious complications—hæmorrhage, signs of perforation, very intense bronchitis, pneumonia, pleurisy, or intense meteorism, with severe diarrhœa. Fourthly, there are cases which are not bathed at first because the diagnosis seems doubtful. Two of the fatal cases fell into this group. Two advantages are claimed for hydro-therapy in typhoid fever—a mitigation of the general symptoms of the disease and a reduction in the mortality. From his experience Dr. Osler is of opinion that these claims are well based. He maintains that the cold bath treatment, rigidly enforced, appears to save from six to eight in each hundred patients suffering from typhoid fever admitted to the care of the hospital physician.

MEDICAL EMERGENCIES IN THE NIGHT.

How long will it be before society makes provision for the night emergencies of illness as it does for those of fire? At present it throws all the onus on the medical profession, and medical men are expected to turn out at any ring of the bell, perhaps when themselves ill or exhausted after a hard and ill-paid day's work. The *Bradford Observer* publishes the particulars of such a case. A labourer attacked in the night with hæmatemesis sent for two or three medical men, who exercised their right of refusal. At last his messenger met a policeman, who sent him to the relieving officer, who gave him an order to Mr. White. When Mr. White's assistant arrived about an hour and a half later—he would have been there sooner but for some misreading of the address—the patient was dead. The jury was satisfied with the assistant's (Mr. Burnett's) explanation, and returned a verdict of "Death from natural causes." The question of emergencies and the provision for them remains. It is unreasonable to throw the blame of non-attendance on medical men. *Semper paratus* is an excellent motto for the profession, and one generally acted on, but it implies some obligation on the part of society. And the reckless carelessness of society in the matter is to blame for instances in which the usual benevolence of the profession seems to fail.

LEPROSY IN NEW SOUTH WALES.

THE total number of persons admitted to the New South Wales leper lazaret at Little Bay from April 19th, 1883, to Dec. 31st, 1893, was fifty, six of whom were females, all of European descent, five being natives of New South Wales and one a native of New Zealand. Of the forty-four males nine were natives of New South Wales, all of European descent, and one was English, the remainder being made up of twenty-nine Chinese, one native of India, one West Indian, one Javanese, and two South Sea Islanders. During that period there were thirteen deaths, and the West Indian patient was discharged, his sores having healed and there being no law warranting his detention. On Jan. 1st, 1894, there were, therefore, thirty-six persons at the lazaret. During 1894 twelve persons were reported in accordance with the Leprosy Act as suspected lepers, but on investigation seven were found to be suffering from some other disease, and five who suffered from leprosy were placed in the lazaret; of these one was a native of New South Wales, of European descent, one a native of Queensland, of European descent, one a native of Saxony, one of New Caledonia, and one of India. The number remaining on Dec. 31st, 1894, was forty, one native of New South Wales having died during the year. The number of persons segregated during 1894 is considerably less than during any year since the notification of leprosy became compulsory; the comparatively numerous admissions during 1891 and 1892 were no doubt owing to the newly created necessity of notifying cases. No application has been made to the Board of Health for the special isolation of any patient outside the lazaret, and at the present time all known cases of leprosy are confined there. The accounts contain entries of £148 for drugs and £168 for tobacco, cigars, and opium. The attendants and nurses at the lazaret are under the direct supervision of the medical superintendent and the matron of the Coast Hospital. Elaborate descriptions of the last five cases, written by Dr. J. Ashburton Thompson, have been printed by the Board of Health Office, 127, Macquarie-street, Sydney, and every facility is given to members of the medical profession to visit the lazaret for the purpose of studying the disease.

THE CASE OF SURGEON LEA.

WE have referred to this case upon several previous occasions.[1] We understand that several members of Parliament have interested themselves in the question and that the subject will, doubtless, be referred to on the reassembling of Parliament. We notice that the *Times* of Nov. 6th in its Naval and Military Intelligence contains the following announcement: "Captain W. L. H. Browne to the *Ringarooma*," and we shall be curious to see whether this has any bearing or not on the matter in question.

"SUMMER AND WINTER WITHIN A MONTH."

OUR chief rainfall authority, Mr. G. J. Symons, F.R.S., writing to our contemporary the *Times*, gives under the above heading some interesting figures with regard to the temperatures in London during the last seven days of September and the corresponding dates of October. The mean of the maxima and minima in September from the 24th to the 30th was 65·0°, 1·9° warmer than the average warmest week during a long series of years. The mean of the maxima and minima in October during the period referred to was 35·9°; the average temperature of the coldest week, also during a long period of years, is 37·9°, thus making the week ending Oct. 30th, 1895, 2·0° colder than the average coldest week in the year. The occurrence of second fruit crops and spring blossoms in winter comes upon us now with little or no surprise, but the above facts are little less than sensational.

THE GASEOUS PRODUCTS OF CERTAIN PYRENEAN WATERS.

IN some of the sulphurous springs in the Pyrenees the water is remarkable for producing very minute gaseous bubbles soon after it is drawn, the ebullition in a few instances continuing for hours. Many of these springs, which are called *azoades* by the Spaniards because they yield nitrogen, are to be found on the southern slopes of the range, at Panticosa, and elsewhere; but, as is well known, there are also several on the French side, the most celebrated being those of Salut de Bigorre, Cauterets, and La Rallière. During a sojourn at Cauterets MM. Bouchard and Troost occupied their leisure in analysing these gases, and the following are the conclusions which they communicated to the Académie des Sciences: "We are not absolutely decided as to the origin of all the gases contained in these mineral waters, and it is possible that those with which we occupied ourselves may have owed their origin to the atmospheric air drawn down into the depths by the surface water. The latter, after undergoing alkalinisation in a sulphurous medium, would rise again to the upper stratum, deprived necessarily of oxygen and carbonic acid, and containing only nitrogen and argon. It would seem, nevertheless, even at this stage of the investigation, that although a portion of the argon, and perhaps also of the helion, may be derived from atmospheric sources, the presence of both is likewise due in part to some subterranean action. In one of

[1] THE LANCET, June 15th, 22nd, and 29th, and Aug. 17th, 1895.

the springs which we examined both these gases were found coexistent, whereas in another helion alone was revealed, while in a third there was evidence of something in addition to the helion, which was certainly not argon." In this connexion it would be interesting to note whether any correspondence exists between the medicinal properties of the various Pyrenean waters and the nature of the gases emanating from them, more especially with reference to argon and helion. The entire subject is well worthy of renewed investigation, when no doubt many other important points will receive elucidation.

METROPOLITAN HOSPITAL SUNDAY FUND: COUNCIL MEETING.

A SPECIAL MEETING of the council of the Hospital Sunday Fund was held on Thursday last, Nov. 7th, under the presidency of Sir Joseph Renals, Bart., the retiring Lord Mayor, to receive the report of the Distribution Committee, who at their meeting last week announced that the sum of over £61,000 would be available this year for distribution among the various hospitals. At the same time it was hinted that a still further sum would probably be forthcoming before the financial year of the Fund closed. This means that participating institutions will receive a further grant equal in amount to three-eighths of the grant made in August last. The receipts from the churches this year exceed those of previous years, but it must be borne in mind that it is to the munificence of Mr. Barnato and his friends that the increase is in a great measure due. The Lord Mayor, too, has worked most assiduously for the Fund, and as he now gives place to his successor as President of the Fund we take the opportunity of tendering him our most hearty thanks, not only for his kindness in placing the rooms of the Mansion House at the disposal of the Fund, but for his personal labours in presiding at the meetings and his ever-ready help and interest in all that concerned the Fund. A full report of the proceedings will appear in our next issue.

THE ADMINISTRATION OF OATHS IN COURTS OF LAW.

OUR remarks in THE LANCET of Oct. 26th on the above subject have this week received an endorsement in a Sussex police-court which it is hard to look upon as other than a very unwieldy and ridiculous joke. The Rector of Graffham and East Lavington, the Rev. Rowley Lascelles, was concerned as a witness in a trespass case which was heard recently before the Petworth magistrates, Major Sir Walter G. Barttelot, Bart., being in the chair. Mr. Lascelles asked to be sworn in the Scotch fashion, whereupon the following colloquy ensued:—

The Chairman: I should like to know, **Mr. Lascelles**, why you, being a clergyman of the Church of England, object to kiss the Book?

The Rev. R. Lascelles: I have a strong objection to kissing the Book in these days of infectious diseases. I should be happy to kiss it if I may turn it inside out.

This was done, and Mr. Lascelles having been sworn in the usual fashion the chairman went out of his way to remark in an undertone: "He is afraid of catching an infectious disease from the Bible." Would Sir Walter Barttelot argue, then, that scarlet fever could not be caught at church, and that while a patient's letters and novels would need disinfecting, contagion could not be conveyed within the pages of his Bible or Prayer Book? Even more to be deprecated was the speech of a later witness, who, when he was sworn, piously remarked: "Although I am only a layman I am not afraid of catching infectious diseases from the word of God." It is impossible to believe that these phrases were the result of any thought whatever. If certain combinations of words and letters are safeguards against contagion, let us drop isolation and return to the use of phylacteries; let us inscribe the walls of our small-pox hospitals with pious phrases and build Board schools next door, for absurdity such as this would be our justification.

CANCER CURERS IN SWANSEA.

A SWANSEA correspondent writes that Mr. E. Davies, the medical officer of health, and Messrs. Rawlings and Brook attended last week at the police-court and complained to the stipendiary magistrate that a number of persons in Swansea profess to be able to cure cancer, and although not possessed of any medical knowledge or qualifications, nevertheless give advice to patients suffering from this disease. Cases were adduced in proof of these statements, and a summons was applied for against one of these pretenders, a woman who had treated a patient improperly. The stipendiary magistrate regretted the facts, but said that he was unable to take any action in the matter, and thought that some amending of the Medical Acts was required. Cancer patients in their emergency lend a willing ear to the specious promises of ignorant or interested advisers. Legislative enactments against the abuses connected with unqualified practice would no doubt be desirable, but in the present state of public opinion there is little hope of their being seriously considered, and such social anomalies as the cancer curers in Swansea, provided that they make no claim to the possession of a diploma, usually incur no penalty or reproach beyond the occasional censure of a coroner's jury.

THE TYNE PORT AND THEIR MEDICAL OFFICER.

THE announcement made in our columns on Oct. 26th (p. 1074) that Dr. Henry Armstrong had resigned the post of medical officer of health to the Tyne port sanitary authority will have been received with regret; but it is impossible to regard his action otherwise than justified under the circumstances. The trivial attempt made a short time ago to identify him personally with a case of small-pox that occurred in one of the Tyneside districts showed that on his board there were some at least who failed altogether to appreciate the high professional standing which Dr. Armstrong has acquired in matters relating to public health during a series of years which he has devoted to that subject. And no one could have been surprised, when application was made to the Local Government Board to inquire into the matter, to find that the central authority informed the port authority, after fully considering the matter, that they saw nothing whatever to inquire into. This rebuff was followed by a motion that was desirable that the port medical officer should live near the mouth of the river, and Dr. Armstrong at once wrote a dignified letter to the authority stating that he could conceive that the alteration thus suggested might have certain advantages, and therefore, in order that the authority might feel perfectly free to act as they saw best, he placed his resignation in their hands. Now the port authority want to get another officer for £150 a year—that is, we presume, someone who will either work up a respectable means of living by taking other work elsewhere, or someone already busily engaged in private practice in the neighbourhood. But they evidently see that to lose the services of an official who has devoted his whole time to his public duties will be a blunder, and hence they want to retain Dr. Armstrong as a consulting officer. Whether he will ever accept any such divided responsibility towards a body which has acted as the Tyne port authority

has remains to be seen. One thing is certain, the notoriety for successful action which attaches to this port is due to the notoriety for ability and administrative capacity which in this country—and, indeed, in Europe and America—has been acquired by Dr. Armstrong as one of the leaders and pioneers in the work of port sanitation. It was his individuality that gave such confidence during the cholera importations of 1893–95; and his loss will be a loss to a larger circle than the authorities whose districts border on the Tyne.

THE BRITISH MEDICAL ASSOCIATION AND THE MEDICAL SERVICES IN INDIA.

WE have been favoured with a copy of a resolution and protest from the South Indian Branch of the British Medical Association, relative to the proceedings and action taken by the Public Health Section of the association at its late meeting in London, for publication in THE LANCET. The resolution has reference to the subject of Indian sanitation, and was adopted at a special meeting held at Madras on Sept. 20th, and has been forwarded to this country with the view of its being laid before the council of the association. We have already dealt with this subject generally in an Annotation in THE LANCET of Oct. 12th last in connexion with the communications which we had received thereon from various other sources. The matter having now been referred to the council of the British Medical Association, it does not seem necessary to publish the documents *in extenso* in our pages. Briefly described, the resolution with its accompanying protest refers in strong terms to the alleged inaccurate, misleading, and unjust nature of the statements that have been put forward, and upon the unmerited discredit which such statements are calculated to bring upon a large body of the profession in India and upon the Government which the medical officers in both the civil and military departments have the honour to serve. It is contended that an accurate knowledge of all the facts regarding sanitary progress in India, and of the work done there during the past thirty years by members of the medical services and of the medical profession generally, would lead to a very different conclusion from that which seems to have been formed.

AFTER full consideration it has been determined to hold the meeting of the General Medical Council at the usual time. Members have been summoned to meet on Tuesday, Nov. 26th, at 2 P.M. The meeting will be held at the Royal College of Physicians of London. This is not the first time the Council has been indebted to the kindness of the College. We cannot but think that the President is acting wisely in holding the usual meeting, even if at some little inconvenience to the members and officials. The powers of the Council are too grave for a few months' delay to make no difference. The meetings of committees will be held as usual at the premises in Oxford-street.

WE beg to call the attention of our readers to Sir William Broadbent's letter (p. 1187) urging upon the profession the claims of the British Medical Benevolent Fund. The work which the Fund does is admirable, and the distress which it relieves so genuine and so bitter, that we feel confident that the honorary treasurer's appeal will meet with cordial replies.

PROFESSOR H. MARSHALL WARD, F.R.S., the well-known cryptogamic and physiological botanist and Professor of Botany in the Royal Indian Engineering College, Cooper's Hill, has been elected Professor of Botany in the University of Cambridge, in the room of the late Professor Babington.

THE BATTLE OF THE CLUBS.

(*Continued from p. 1137.*)

THE FORMATION OF A PROVIDENT MEDICAL ASSOCIATION AT BEXHILL-ON-SEA.

WE congratulate the medical men of this seaside town on the formation of a Provident Medical Association on the lines of the combination whose success is already assured at the neighbouring town of Eastbourne. The following are the rules and constitution of the Bexhill Provident Medical Association formed in October, 1895:—

RULES AND CONSTITUTION.

1. *Object.*

This Association is a self-supporting society to enable those who cannot pay for medical attendance at the usual charges to secure for themselves and their families the advantage of medical attendance, advice, and medicine during illness.

2. *Management.*

It shall be managed by a general committee, which shall consist of the whole of the medical men in Bexhill who shall sign the undertaking. The general committee shall appoint a chairman and honorary secretary annually. The whole of the business of the Association shall be managed by the general committee, which shall hold an annual meeting and, in addition, shall meet as often as the business of the Association demands. Four members shall form a quorum.

3 *Undertaking.*

Any duly qualified and registered practitioner residing in Bexhill (not practising as a homœopath) may become a member of the staff subject only to his appointment being approved by the committee. All members of the staff must also sign an undertaking—1. Not to conduct clubs of their own at all (other than friendly societies registered under the Act) unless it be at rates the same or higher than those of the Bexhill Provident Medical Association. 2. To have no professional intercourse whatever with any medical man who associates himself with any of the companies known as medical aid societies or with similar institutions so long as the methods adopted by these societies include (*a*) canvassing for members in the interests of individual practitioners, (*b*) the virtual sweating of their medical officers by the inadequate remuneration offered for the work done.

4. *Membership.*

Artisans and their families, and others who may be considered suitable by the committee shall be eligible for membership, provided they live within two miles and a half from the town hall. No person can become a member who is in receipt of parochial relief. All applicants must be in good health on joining, and must first be passed as such by one of the medical officers. If persons in indifferent health are to be admitted at all it can only be at special rates determined by the committee. Each medical officer shall receive the subscriptions from the members on his list, and render to the monthly meeting a list of defaulters and new members.

5. *Wage Limit.*

Although a most desirable matter, it is very difficult in practice to adopt a hard-and-fast "wage limit," and therefore it would appear that the best way of preventing abuse of the Association by persons who are too comfortably off will be by leaving absolute discretion in the hands of the committee to consider the case of every applicant on its own merit. But, as a general rule, it may be laid down that in the case of families they shall be eligible, if the combined incomes of the parents do not exceed 30*s.* a week, at the rate of 2*d.* a week each adult—*i.e.*, over fourteen years of age—and 1*d.* a week for each child. It will be expected that the whole of the family shall be entered on the lists (exception being made in the case of any members who may be already members of a registered friendly society), but in large families not more than six children shall be charged for. Any person who has been a member in childhood can, on completing his or her fourteenth year, continue as an adult member by paying the additional penny a week.

No domestic servant can be admitted as a *joining* member, but a member who enters service does not thereby forfeit the privileges of membership. When in service servants can only be attended at the surgery. Single persons shall pay at the rate of 2*d.* a week.

If at any time a member is discovered to be in receipt of an income such as renders him or her, in the opinion of the committee, unsuitable for membership, it shall be in the power of the committee to remove his or her name from the books of the Association on giving such member a quarter's notice. But it shall always be open to such persons to first explain their circumstances to the committee if they so wish. Each member or family shall have a card of membership bearing their names and address; and on the back of this card receipts of all payments shall be made by the doctor on whose list the members are. To cover the cost of printing and material a charge of 2*d.* will be made for each card.

All the subscriptions are to be paid monthly or quarterly, and in advance, to the member's medical attendant. No member more than a month in arrears will be entitled to the benefits of the Association. If any member be more than two months in arrears his or her name shall be erased from the books. No person who, having been erased from the books, desires readmission shall be received again as a member unless he pay up all arrears due by him or such part of the same as the committee may require.

Members on joining must select their own doctor, but cannot change him for another without first informing him verbally or in writing that it is their wish to place themselves under another member of the staff; and they must always give a quarter's notice of any such change.

Each of the medical staff shall have the right to refuse to receive on his list any member.

In the event of a married member expecting to be confined, it will

be expected that she shall employ the doctor on whose list she is to attend her. If she does not, she will forfeit her right to his professional services for a period of six weeks from the date of her confinement. The fee for attendance at a confinement is 15*s.*, and must be prepaid to the doctor in full one month prior to the confinement. Attendance at a miscarriage or premature confinement will be at the same rate. The fee for vaccination shall be 2*s.* 6*d.* Fractures, dislocations, and major surgical operations will be charged for at the following rates:—

Nature of Case.	Charge. £ *s.* *d.*
Compound fracture of thigh or leg	5 0 0
Amputation of leg, arm, foot, or hand	
Strangulated hernia	
Fracture of lower jaw	3 0 0
Simple fracture of thigh	
Simple dislocation of hip	
Fracture of patella	
Fracture of leg, tarsus, metatarsus, or toe	
Amputation of finger or toe	
Dislocation or fracture of arm or forearm	1 0 0
Dislocation of knee or ankle	
Fracture of carpus, metacarpus, fingers, or thumbs ...	
Fracture of clavicle, scapula, olecranon, or ribs... ...	

A minimum fee of 10*s.* 6*d.* shall be fixed for consultations or assistance at confinements.

All the above rules and any others they may subsequently adopt the committee shall have in their power to alter, provided there is a two-thirds majority of the committee in favour of the proposed change, and provided also that every member of the committee shall have had twenty-eight days' notice of the meeting and have been informed at the same time of the terms of the resolution to be laid before the meeting embodying the proposed alteration.

We are gratified to learn that the formation of the association had its origin in the articles published in THE LANCET. For it is honourable and amicable coöperation of this kind that will alone protect the members of the profession against the tactics of some of the numerous sick aid institutions whose methods include—in the words of the above memorandum—(*a*) canvassing for members in the interests of individual practitioners, and (*b*) the virtual sweating of their medical officers by the indequate remuneration for the work done. The rules of the Bexhill Provident Medical Association strike us as being good and comprehensive, and we recommend them to the consideration of medical men in other quarters where a stand against organised oppression is felt to be necessary. The committee of management consists entirely of the medical men who do the work, and no place is found upon it for the sort of philanthropist whose name too frequently figures on the bills of charitable institutions where the only thing to be given away is the medical man's time and labour. The unanimity of the local practitioners in the promotion of such associations is, of course, the essence of their success. Indeed, it makes the success inevitable; and that this has been already recognised at Bexhill is proved by the fact that an emissary from one of the sick-aid institutions has been to the town with a view of persuading some one of the medical men to default. We are happy to learn that he was quite unsuccessful. The poor of Bexhill who are unable to pay for medical attendances at the usual charges will be able to secure for themselves direct from their medical men adequate attendance at rates which will allow of the proper discharge of the duties undertaken; while their just claim to such consideration will not be vitiated and obscured by the intrusion into the provident association of persons quite able to pay on a higher scale. The poor will be benefited and the medical men will manage their own affairs instead of being placed in the position of underpaid employés.

RIVIERA WINTER SERVICE.—The International Sleeping Car Company announce the following arrangements for the winter season in the South of France:—The Calais-Mediterranean Express will run every Thursday (commencing Nov. 7th) in connexion with the 9 A.M. service from London (Victoria and Charing-cross), calling at Marseilles, Cannes, Nice, Monte Carlo, Mentone, &c., reaching Vintimille at 12.36 P.M. the following day. Baggage will be registered through to destination and examined *en route*. The train will be composed entirely of the company's sleeping and dining cars. A Mediterranean Express will also leave Paris (P.L.M. station) every Tuesday and Saturday at 5.30 P.M., reaching Vintimille at the same time as Thursday's train from Calais. The Nice Express will leave Paris (Gare du Nord) at 7.44 P.M. daily, to which, between the Nord and Lyon stations, a restaurant car will be attached. The Rapide will leave Paris (Gare de Lyon) for the Riviera every evening at 8.25. Through tickets, single and return, are to be obtained at the company's offices, at 14, Cockspur-street, S.W., where places must be reserved in advance.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

THE NEWPORT EPIDEMIC OF 1894.

THE official report[1] by Dr. Theodore Thomson on the serious epidemic of enteric fever which occurred at Newport, in the Isle of Wight, in the autumn of last year has been issued by the Medical Department of the Local Government Board. It is a somewhat voluminous document and it contains a number of lithographed and other plates; but having regard to the importance of the occurrence from a public health point of view, especially in relation to chalk waters, it is much to be regretted that the Stationery Office should place a price on it which is so high as to carry the suspicion that they want, on behalf of the State, to make money out of it. Including some 40 attacks of enteric fever in the earlier parts of 1894, there occurred no less than 436 attacks of that disease on a population of 10,512 in the borough of Newport, the great bulk taking place between Sept. 19th and the end of November. There were, in addition, 36 attacks in the barracks and prison, and 44 in other adjacent places in the rural district; these attacks also occurred essentially at the same period. And, further, there were 43 attacks which were regarded as doubtful. In seeking the cause of this very exceptional epidemic Dr. Thomson spent much time, and he discusses every possible source of the disease with much care. We can, however, only summarise his results. In the matter of sewerage and drainage, the borough, barracks, prison, and other localities invaded had nothing in common, having separate systems; some places had no sewers, and even in the borough there was no special incidence of fever on any one line of sewers, although many of the culverts were defective in the extreme. General sanitary circumstances had in like manner to be set aside; there was nothing in common with them to account for the simultaneous prevalence of fever in Newport, Carisbrooke, Gunville, the prison, and the barracks. It also became clear that milk was not the agent whereby enteric fever had been suddenly disseminated over the several invaded places; but it was otherwise when the water-supply came under consideration. Of some 2660 houses in Newport only about 50 derive their water from local wells; the remainder are supplied from a public service which is in the hands of the corporation and which is derived from two wells and certain adjacent springs at the eastern end of Carisbrooke village. The wells supply the high-level service, and the springs the low-level service. One well, the old well, is sunk 23 ft. into the chalk, and then has a bore hole of 20 ft. more; and the well has no puddling of clay or other protection. The new well is 27 ft. deep and has a bore hole of 80 ft. more in depth. For 4 ft. from the surface the well is bricked and concreted, and the remainder is lined by iron cylinders. This public service goes to 121 out of 159 houses in Carisbrooke, to 67 out of 96 houses in Gunville, as also to Parkhurst Prison and the barracks. Of the 436 cases of enteric fever in Newport 432 were known consumers of the corporation water service; 4 are not known to have consumed it. Of 28 persons attacked in Carisbrooke 25 had drunk unboiled Newport water, 2 are not known to have drunk it, and 1 was removed ill from Newport to Carisbrooke. In Gunville all the 7 persons, out of a population of 295, who were attacked were consumers of the public water-supply; and the same applies to the prison and the barracks. There is a very considerable aggregation of houses in the vicinity of the waterworks; many of the Carisbrooke houses drain into cesspools which, like the wells, are sunk in the chalk. Two cesspools, 15 ft. and 20 ft. deep, were simply disused wells; and the general trend of water in the chalk towards the bottom of the valley would lead to cesspool soakage gaining access to the chalk water. A mill pond close by has also soakage from privies &c. fouling it, and the level of the mill-pond water is such as to facilitate soakage of its contents into the low-level reservoir of the waterworks. As the result of throwing lithium into this mill-pond it was recovered from the reservoir and from the old well.

[1] Eyre and Spottiswoode, East Harding-street, E.C.; John Menzies and Co., Edinburgh and Glasgow; Hodges, Figgis and Co., Dublin. 1895. Price 7*s.*

None was traced in the new well. Water taken from the low-level reservoir was found to contain the bacillus coli communis and the bacillus fluorescens putidus; and the latter bacillus was also found in the old well water. Similarly the bacillus coli was found in water taken from a tap in Parkhurst Prison; and when the corporation had samples of their water examined on their own account both the bacillus coli communis and the bacillus of enteric fever were reported to have been found in it. The report, in short, supplies a body of evidence which affords the strongest possible presumption that the Newport public water served to distribute the poison of enteric fever; and circumstanced as the wells are in a neighbourhood where there had been not infrequently fever, and which is constantly the resort of strangers and visitors, there is no lack of material for surmising how the infection may have got access to the supply. Both at the prison and the barracks orders were given on Oct. 26th to boil all milk and water, and the Newport supply was cut off from the barracks on Oct. 29th. This report, which needs to be read in detail in order to be fully appreciated, coming as it does so soon after a somewhat similar one concerning the still graver epidemic at Worthing, raises very important considerations as to chalk well waters, and is in other ways a document of much interest from the etiological point of view. By means of fissures and otherwise matters are liable to reach chalk wells in the face of greater obstacles, such as those involved in distance and otherwise, than was formerly deemed to be probable. The danger to public water-supplies which results has now been proved to demonstration, and it behoves those who are responsible for advising as to the localisation and construction of chalk wells to hold the risks which have been shown to exist in constant view, and to have regard not only to the population and houses within a zone of any such well at the time of its construction, but also as to the prospects which are in view in the future. Two such stories as those which have formed the basis of the official reports on Worthing and Newport deserve the most serious consideration of sanitary authorities, medical officers of health, and water engineers.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6542 births and 4454 deaths were registered during the week ending Nov. 2nd. The annual rate of mortality in these towns, which had been 19·1 and 19·7 per 1000 in the two preceding weeks, further rose last week to 21·9. In London the rate was 21·2 per 1000, while it averaged 22·4 in the thirty-two provincial towns. The lowest rates in these towns were 12·3 in Croydon, 14·2 in Huddersfield, 15·0 in Halifax, 17·3 in Portsmouth, and 17·6 in Brighton; the highest rates were 26·2 in Burnley, 27·5 in Manchester, 30·8 in Salford, 33·1 in Blackburn, and 35·5 in Liverpool. The 4454 deaths included 590 which were referred to the principal zymotic diseases, against 670 and 583 in the two preceding weeks; of these, 150 resulted from measles, 136 from diarrhœa, 108 from diphtheria, 83 from "fever" (principally enteric), 56 from whooping-cough, 53 from scarlet fever, and 4 from small-pox. No fatal case of any of these diseases occurred last week in Norwich; in the other towns they caused the lowest death-rates in Croydon, Brighton, Halifax, Plymouth, and Nottingham, and the highest rates in Sunderland, Wolverhampton, Burnley, Salford, and Blackburn. The greatest mortality from measles occurred in Manchester, Swansea, Wolverhampton, Salford, and Blackburn; from scarlet fever in Birkenhead and Salford; from whooping-cough in Burnley, Liverpool, and Bradford; from "fever" in Preston, Salford, Sheffield, and Sunderland; and from diarrhœa in Bolton, Hull, and Burnley. The 108 deaths from diphtheria included 72 in London, 7 in Birmingham, 6 in West Ham, and 4 in Manchester. Three fatal cases of small-pox were registered in West Ham and 1 in London, but not one in any other of the thirty-three large towns. There were 106 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, Nov. 2nd, against 158, 119, and 114 at the end of the three preceding weeks; 29 new cases were admitted during the week, against 9, 7, and 14 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2841, against 2827, 2838, and 2833 on the three preceding Saturdays; 215 new cases were admitted during the week, against 332, 241, and 269 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had increased from 158 to 235 in the three preceding weeks, further rose to 366 last week, but were 28 below the corrected average. The causes of 66, or 1·5 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in West Ham, Portsmouth, Cardiff, Bradford, Leeds, and in eleven other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Liverpool, Huddersfield, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·7 and 18·9 per 1000 in the two preceding weeks, further rose to 20·5 during the week ending Nov. 2nd, but was 1·4 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 17·1 in Leith and 17·5 in Dundee to 22·3 in Perth and 22·5 in Paisley. The 591 deaths in these towns included 25 which were referred to diarrhœa, 19 to whooping-cough, 11 to scarlet fever, 6 to "fever," 5 to diphtheria, 3 to measles, and not one to small-pox. In all, 69 deaths resulted from these principal zymotic diseases, against 91 and 65 in the two preceding weeks. These 69 deaths were equal to an annual rate of 2·4 per 1000, which was 0·4 below the mean rate last week from the same diseases in the thirty-three large English towns. The 25 fatal cases of diarrhœa exceeded by 4 the number in the preceding week, and included 10 in Glasgow and 5 in Dundee. The deaths referred to whooping-cough, which had been 13 and 11 in the two preceding weeks, rose again to 19 last week, of which 11 occurred in Glasgow, 4 in Aberdeen, and 3 in Edinburgh. The fatal cases of scarlet fever, which had increased from 4 to 10 in the four preceding weeks, further rose to 11 last week, and included 5 in Glasgow and 2 in Edinburgh. The deaths referred to different forms of fever, which had been 7 and 12 in the two preceding weeks, declined again to 6 last week, of which 4 occurred in Glasgow. The 5 fatal cases of diphtheria showed a decline of 4 from the number in the preceding week, and included 3 in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 92 and 130 in the two preceding weeks, further rose to 136 last week, but were slightly below the number recorded in the corresponding week of last year. The causes of 48, or more than 8 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had declined in the three preceding weeks 26·8 to 20·7 per 1000, rose again to 31·5 during the week ending Nov. 2nd. During the past five weeks of the current quarter the death-rate in the city has averaged 24·9 per 1000, the rate during the same period being 17·9 in both London and Edinburgh. The 211 deaths registered in Dublin during the week under notice showed an increase of 72 upon the number in the preceding week, and included 14 which were referred to the principal zymotic diseases, against 20 and 15 in the two preceding weeks; of these, 5 resulted from scarlet fever, 4 from diarrhœa, 2 from "fever," 1 from small-pox, 1 from diphtheria, and 1 from whooping-cough. These 14 deaths were equal to an annual rate of 2·1 per 1000, the zymotic death-rate during the same period being 2·8 in London and 1·5 in Edinburgh. The deaths from measles, which had been 3 and 1 in the two preceding weeks, rose to 5 last week. The fatal cases of diarrhœa, which had declined from 17·6 in the three preceding weeks, further fell to 4 last week. The deaths referred to different forms of "fever," which had been 4 and 5 in the two preceding weeks, declined again to 2 last week. The 211 deaths in Dublin last week included 50 of infants under one year of age, and 44 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons considerably exceeded those recorded in recent weeks. Eight inquest cases and 5 deaths from violence were registered; and 66, or nearly a third, of the deaths occurred in public institutions. The causes of 21, or nearly 10 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

INDIA AND THE INDIAN MEDICAL SERVICES.

THE services of Surgeon-Captain J. G. Hojel (Bombay) are placed at the disposal of the Government of Bombay. The services of Brigade - Surgeon - Lieutenant - Colonel G. W. R. Hay (Bombay) are placed temporarily at the disposal of the Government of Bombay. Surgeon-Lieutenant-Colonel G. Hutcheson, M.D., is appointed to officiate as Inspector-General of Civil Hospitals, North-West Provinces and Oudh, until further orders. Surgeon-Lieutenant-Colonel J. W. Clarkson and Surgeon-Major C. G. W. Lowdell have respectively delivered over and received charge of the office of Deputy Sanitary Commissioner, Western Registration District.

NAVAL MEDICAL SERVICE.

Fleet-Surgeon George Kell has been placed on the Retired List from Oct. 25th, 1895, at his own request, with permission to assume the honorary rank of Deputy-Inspector-General of Hospitals and Fleets. Staff-Surgeon Arthur Willoughby Russell has been promoted to the rank of Fleet-Surgeon in Her Majesty's Fleet.

The following appointment is notified:—Fleet-Surgeon Archibald M'Kinlay to the *Howe*.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Lieutenant Clark, 1st Banff Volunteer Artillery (Southern Division, Royal Artillery), to be Surgeon-Captain.

VOLUNTEER CORPS.

Artillery: 1st Gloucestershire: Surgeon-Captain J. S. Carleton to be Surgeon-Major. *Rifle:* 2nd Volunteer Battalion the Royal Sussex Regiment: Surgeon-Captain W. M. Vores, M.B., to be Surgeon-Major.

THE JAPANESE ARMY MEDICAL ORGANISATION.

Contrary to the general run of Blue-books, Surgeon-Colonel W. Taylor's Report on the Medico-military Arrangements of the Japanese Army in the Field in 1894 and 1895, is an interesting document containing much readable matter dealing with the organisation of the medical field service in Japan. The principal general hospitals at the base of operations, the field hospitals, and the dressing and regimental stations were conducted in a manner most satisfactory. One point worthy of note is the foresight with which the Japanese authorities anticipated probable requirements. They never waited till a difficulty actually arose, but had ample provision made for almost any contingency that might arise, and consequently the work was done with smoothness, regularity, and ease. Considering the efficiency of these departments of the Japanese war service, however, their ignorance of sanitation was not a little surprising. At the beginning of the late war it is true they had "Orders for the Field Sanitary Service," but these orders did not refer to questions of sanitation at all. Such subjects as conservancy, latrines, urinals, prevention of the fouling of wells or other sources of water-supply were not dealt with and in practice the same want of thought for all sanitary precautions, even the most ordinary, was evident. Early in March, however, they awoke to the importance of sanitary measures, and an elaborate system of drainage and sewerage was carried out in the most expeditious and admirable manner. With regard to water-supply and its means of purification each battalion carried with it a box containing appliances and materials for the chemical analysis of water, it being the duty of one of the officers to go on ahead to any proposed halting-place for the purpose of examining and reporting upon the water. Two simple filters, similar in construction to that popularly known in England as the Poor Man's filter, except that a bucket is substituted for the flower pot, are carried by each battalion, and a small pocket filter is supposed to be carried by each officer. It is satisfactory to note that no cases of septicæmia were reported in the hospitals.

THE LATE INSPECTOR-GENERAL SIR WM. MACKENZIE, K.C.B., M.D.

We briefly recorded last week the death of this officer, who had a very long and distinguished military career in India. Inspector-General Sir Wm. Mackenzie, K.C.B., C.S.I., M.D., was also honorary physician to the Queen. He was born at Dingwall, Ross-shire, in 1811, and died on the 29th ult. at his residence in Gloucester-terrace, Hyde Park, at the ripe age of eighty-four. He graduated M.A. of King's College, Aberdeen, in 1830, M.R.C.S. London in 1832, entered the Madras Medical Service in 1835, and became M.D. of Aberdeen University in 1856. Few men possessed a longer or more distinguished war service than did the late Sir Wm. Mackenzie, as may be seen from the following record. He served with the Ellickpur Force of the Nizam of Hyderabad's army in 1841, and again in 1851 against insurgent Rohillas; as Staff Surgeon to the 1st Brigade Central India Field Force, under Major-General Sir Hugh Rose, during the whole of the campaign of 1857-58, and was present at the engagement before Dhar, the cavalry action at Chickliah, siege of Dhar; operations at Mundersore on Nov. 21st, 22nd, 23rd, and 24th, 1857; siege of the Fort of Chanderee from March 6th till the final assault on March 17th, 1858; general action at the Betwah on April 1st, 1858; the assault on the Fort of Jhansi, April 3rd, and subsequent operations; the taking of Koonch, May 7th, 1858; the engagement at Goolowlee, May 23rd, 1858; capture of Calpee, May 22nd, 1858; engagement at Morar, June 16th, 1858; and subsequent attack on Gwalior, with pursuing column under General Napier, and engagement at Jowrah Allipore. He also served as staff surgeon to the Bearer Field Force from November, 1858, to March, 1859, and was present at the engagement of Chichumbah on Jan. 15th, 1859. For these services he was in 1859 awarded the C.B., and in 1867 the C.S.I.; he was appointed honorary physician to the Queen in 1857, and subsequently K.C.B. He was Inspector-General of the Madras Medical Department and retired in 1871.

THE MALARIA PARASITE.

The Anglo-Indian papers of the latest date contain some further communications and information regarding Surgeon-Lieutenant-Colonel Lawrie's researches as to the non-existence of Laveran's polymorphic parasitic bodies in the blood of malarious patients, to which we have already alluded more than once. It appears that Surgeon-Captain Patrick Hehir, M.D., who is regarded as an excellent microscopist and has greatly devoted himself to the study of blood parasites, had been invited to demonstrate the malaria parasite, but it is alleged that he failed to convince those who examined his specimens at Hyderabad that they were other than illusory appearances. Surgeon-Lieutenant-Colonel Lawrie is quite prepared to maintain that he has demonstrated the fact that Laveran's parasitic forms are in reality but altered white blood-cells. A full and detailed report of the Hyderabad researches is, meanwhile, as we have already said, awaited with much interest.

THE DINNER TO THE DUKE OF CAMBRIDGE.

The dinner given to Field-Marshal H.R.H. the Duke of Cambridge by the War Office officials at the Cafe Monico on Tuesday, Nov. 5th last, was attended by some two hundred guests, including not only men who have made themselves conspicuous by their valour in the military service of the country, but also some distinguished civilians. The Marquis of Lansdowne, who presided, proposed the toast of the evening in felicitous terms, remarking on the distinguished services of His Royal Highness to the country. In his reply the Duke, in a dignified and highly sympathetic manner, referred to his endeavours not to retard any improvement for the benefit of the Army and to his ready acquiescence in any change likely to benefit a colleague.

DEATHS IN THE SERVICES.

Surgeon-General J. A. C. Hutchinson, M.D., I.M.S. (retired), at Bedford on the 26th ult., aged sixty-seven years. He retired in 1884.—Deputy-Surgeon-General Robert Sander Bateson, I.M.S. (retired), on the 25th ult., at Lancaster, aged sixty-four years. The late officer served during the Indian Mutiny and was at the actions near Agra and in the engagement with Tantia Topee at Dowsa.

Surgeon-Major-General T. Walsh, principal medical officer of the Bengal Command, is about to proceed home on medical certificate, and Surgeon-Colonel T. Maunsell, it is reported, will officiate in his stead.

ROYAL INSTITUTION.—A general monthly meeting of the members of the Royal Institution was held on Monday afternoon, the 4th inst., Sir James Crichton Browne presiding. The managers reported that the late Mr. John Bell Sedgwick, M.R.I., had bequeathed £300 to the Royal Institution in aid of the Fund for the Promotion of Experimental Research at Low Temperatures. The special thanks of the members were returned to Sir Frederick Abel, Bart., for his donation of £50 to the same fund.

Correspondence.

"Audi alteram partem."

THE BRITISH MEDICAL BENEVOLENT FUND.

To the Editors of THE LANCET.

SIRS,—I am sorry once more to be obliged to make an appeal to the profession on behalf of the British Medical Benevolent Fund, but for the last few months we have at every meeting of the committee overdrawn our account at the bank and have even then been unable to afford assistance in many cases where it was felt that help ought to be rendered. In September £44 was all the money available, and six grants were made, amounting to £50. At the meeting on Tuesday, Oct. 29th, there were twenty cases to be considered, besides those postponed from September, and only £34 was in hand to meet the claims, and, till the end of the year, there is no prospect of improvement in our financial condition unless through the response of the profession to our appeal.

During the year 174 cases have come before the committee and 119 grants have been made, amounting to £1083. This gives an average of about £9; but, as a matter of fact, our grants, to be of the greatest use, require to be £12 or £18, so as to enable a monthly instalment of £1 or 30*s.* to be paid throughout the year, and lately we have been obliged to reduce the allowance to the inadequate sum of £5 or £6, sometimes with the promise that a second application may be sent in at the end of six months if funds permit.

Applications and the severity of the cases which come before us increase year by year, and the subscriptions and donations, on which we depend, do not keep pace with them. The working expenses of the fund are extremely small; there is no rent for offices, no expenditure on advertisements, and no payment of officers except for clerical assistance, which is absolutely necessary, as the mere writing connected with the investigation of cases and the collection of funds and keeping accounts has become more than could reasonably be expected of men who have other work to do. The cases selected for relief at the last meeting are illustrations of the everyday work of the fund.

1. A widow aged thirty-five, whose husband had become incurably insane after two years' illness. She has three young children, and is penniless. Granted £12, ought to have been £18.

2. A medical man aged seventy-eight, quite unfit to work. Two daughters at home, one an invalid, the other recovering from scarlet fever. Granted £12.

3. A widow with young children and unable to earn anything on account of influenza. Granted £6.

4. A lady sixty-six years of age and quite deaf. Granted £6 for six months.

5. A lady who has maintained herself as a midwife, but is now too infirm to undertake cases. Granted £6.

6. A governess aged thirty-three, who has been obliged to relinquish work on account of illness. Granted £5.

These show the urgency of the distress, and I may mention that a member of the committee has already sent me a donation of twenty guineas.

I am, Sirs, yours faithfully,

W. H. BROADBENT,
Treasurer, British Medical Benevolent Fund.

Brook-street, Nov. 5th, 1895.

"THE BATTLE OF THE CLUBS."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Sept. 21st your Special Commissioner asks the question, What is to be done if men are imported from other towns? with reference to the attempt of the Portsmouth men to combat the action of the members of the clubs in forcing them to attend their wives and children on their own terms. I venture to assert that the answer to that question is a simple one—viz., join the Incorporated Medical Practitioners' Association. Our aim and intention are to unite all the medical men, especially those in general practice, for mutual defence and support; call it a trades-union if you like—union is strength. We have been successful in establishing a branch for Devon and Cornwall, and we intend to take measures to establish branches all over the country, having a branch for divisions or counties, with sub-branches for towns. The members of the Devon and Cornwall branch have signed a declaration similar to that referred to by your Special Commissioner as being signed by the men at Eastbourne.

We have been successful to a very great extent in preventing the London and Manchester Industrial Society, which works a medical aid branch in connexion with, and to help, their insurance work, from extending and establishing itself here. The Incorporated Medical Practitioners' Association, having its headquarters in London and having branches all over the kingdom, will be able, in great measure, to defeat the aims of such societies as the National Medical Aid Society. Associations such as the Portsmouth and the Eastbourne ones will find their hands strengthened by affiliating themselves to us. It is true there are many men who are quite independent of the sort of work which these societies—i.e., National Medical Aid Associations, &c.—take up, but I think that the saying "that man does not live for himself alone" should be remembered by such persons. Looking at it from the point of view of such men, I think they should remember that this sort of thing has a tendency to spread, and that the public, like tigers having once tasted blood, long for more. Perhaps they will say, with Louis XV., "Après moi le déluge." If so, all I can say is that such men are selfish in the extreme and deserve no consideration whatever. I think, therefore, if all men in general practice would join our association and help to form branches in their own neighbourhood much benefit will result to the medical profession, and indirectly, by getting the work better done, to the public as well.—I am, Sirs, yours sincerely,

GEO. JACKSON, F.R.C.S. Eng. (Exam.),
President of the Incorporated Medical Practitioners' Association.

Portland-villas, Plymouth.

To the Editors of THE LANCET.

SIRS,—The enclosed cards are, to my mind, proof of the low state of the medical profession in ————. The medical man whose name is on one of the cards is styled "Dr.," and on his door-plate the same title is used; but reference to the Medical Register for 1895 shows him to have no proper right to the style. He is the holder of several local appointments. The payment made by the Liverpool Victoria Legal Friendly Society (see card enclosed) is only ½*d.* per week per head, and I suppose the agent deducts a commission. Is it not a direct violation of the oath we take to uphold the dignity of the profession to accept such pay? There are other medical men in the town, and these men will not have anything to do with the Liverpool Victoria Legal Friendly Society or the National Medical Aid Company.

I am, Sirs, yours faithfully,

C. F. HARDING.

*** Dr. Harding encloses specimens of the cards of membership of the Liverpool Victoria Legal Friendly Society and the National Medical Aid Company, Limited. The general style of these is probably known to the readers of our articles, and the way in which the two companies work together was explained in our Special Commissioner's letter from Eastbourne.[1] To secure life assurances the former of these companies became intimately associated with the latter, finding it easier to persuade people to insure against sickness than to insure their lives. The canvassers, therefore, point out the advantage of belonging to the National Medical Aid Company, Limited—only 6*d.* entrance fee for individual or family, 1*d.* a week for adults, ½*d.* a week for persons under fourteen, for medical advice, attendance, and medicine!—afterwards explaining that such medical insurance cannot be effected unless the individual insures his life, and the insurance is granted by the Liverpool Victoria Legal Friendly Society. We do not know if the agent in this case deducts any commission, or whether the medical man gets the whole of the

[1] The Battle of the Clubs, THE LANCET, Oct. 5th, 1895.

halfpenny, but we agree with our correspondent that it is deplorable that such fees should be taken.—ED. L.

To the Editors of THE LANCET.

SIRS,—Your article on the subject of the "Battle of the Clubs" in your issue of Oct. 12th contains a reference to this Company which is inaccurate in fact and calculated to mislead. You refer to this Company as one of two assurance companies which combine "medical aid association" with their own proper business. The transactions of this Company, however, are confined exclusively to life assurance, and medical aid forms no part of the Company's operations. In certain cases, I believe, the agents of the Company do introduce persons to medical men who are willing to attend patients at a fee settled by the medical men themselves, and which is collected by persons appointed and remunerated solely by them, and with which our agents have nothing to do. The Company has for years past had only one medical referee at Eastbourne, and he alone reports and receives remuneration from us. I find that the Company's agents have introduced certain persons for medical attendance to one other medical gentleman, who has had a club, but he has no connexion with the Company, and the introductions in question were quite unknown to the Company. I am informed that he has joined the Association lately formed at Eastbourne, but there has been no abandonment of connexion with the Company, for it never existed, and the statement that three medical officers of the Prudential have abandoned their connexion with this Company has no foundation in fact. The real facts of the matter were stated in your issue of Oct. 5th, and I can only suppose that the reference to the Company contained in your issue of the following week was an inadvertence.

I am, Sirs, yours faithfully,
T. C. DEWEY, Manager.

Prudential Assurance Company, Limited, Holborn-Bars, London, Oct. 31st, 1895.

*** We have compared our article of Oct. 12th with that of our Special Commissioner which appeared on Oct. 5th, and regret that we should have alluded to the Prudential Assurance Company, Limited, as offering medical aid to their members. As will be seen from Mr. Dewey's letter there were circumstances that might well lead us to the conclusion we arrived at. We have before now in our columns testified to our sense of the value of the work that is done by the Prudential Assurance Company, Limited, and are glad to publish their disclaimer of all association with the methods employed by sick-aid institutions.—ED. L.

THE ADMINISTRATION OF CHLOROFORM.

To the Editors of THE LANCET.

SIRS,—Your criticism in THE LANCET of Oct. 26th of the use of lint as productive of dangerous concentration of vapour during the administration of chloroform induces me to put forward some arguments for and against the different inhalers that are in use. In administering chloroform two points are of vital importance. First, the administrator should be fully cognisant at every moment of the amount of chloroform vapour which the patient is *at that moment* inhaling. Secondly, an equable quantity of vapour should be maintained, and therefore the chloroform should be added drop by drop. The use of one corner of a new and therefore fairly stiff white towel pinched up into the form of a cone fulfils both these conditions. Chloroform can be dropped on the outside of this drop by drop, and on this texture it produces a wet, dark stain the intensity of which is a visible index to the chloroformist of the quantity of vapour at each instant being presented to the patient. The size of the cone can be adjusted to the requirements of each case, and as soon as one corner begins to show the wet stain less distinctly, becoming limp from the moisture in the patient's breath, one of the other corners can be substituted for it. The quantity being thus appreciated by the eye and its effect on the patient noted, the chloroformist attains, after practice with this method, to some control over, and precision in, dosage, and can tell approximately the number of drops that should be put on the towel at the various stages of anæsthesia. This, together with a full knowledge of the signs of these stages, on the one hand, enables him to avoid concentration of vapour, especially at times of excessive absorption or of defective elimination, and, on the other hand, emboldens him to give a sufficient quantity to prevent the occurrence of incomplete anæsthesia, with its risks to the patient, to say nothing of the annoyance to the operator and anæsthetist.

The objections to the other inhalers may now be briefly considered. The least objectionable appears to be the Scotch method, in which chloroform is poured on the upper margin of a folded towel which is held round the patient's face. The free admission of air that is allowed certainly lessens the risk from concentration of vapour, but as there is more than a single layer of cloth to absorb the chloroform the intensity of the wet stain is no indication of the quantity of chloroform being inhaled. There is also unnecessary waste in the method, a large quantity of vapour being lost and causing annoyance to the administrator. Similarly, Junker's inhaler, while well diluting the vapour, affords no indication of the dose actually being given. Finally, the materials in greatest use as inhalers are flannel and lint, and neither of these shows a distinct wet stain with chloroform. Of 35 fatalities under chloroform from 1892 to 1894, where the form of inhaler used is mentioned, it was in 43 per cent. lint and in 25·7 per cent. flannel—i.e., Skinner's inhaler—against 14·3 per cent. in which a towel was employed. Further, the metal rim of Skinner's inhaler interferes with the evaporation of the vapour and allows drops to fall on the patient's face; and with a double fold of lint an equable quantity of vapour cannot be maintained, sudden concentration being apt to occur whenever the lint is turned after a fresh supply has been added. Of course, the choice of the inhaler is only one detail to ensure the safe administration of chloroform; but I consider that the method I advocate, being more accurate than any other, deserves a wider application than it at present has, and should, until some better method is discovered, displace lint and the other forms of inhalers now in use.

I am, Sirs, yours faithfully,
HOWARD GLADSTONE, M.D., C.M.

Royal Chest Hospital, City-road, E.C., Oct. 29th, 1895.

To the Editors of THE LANCET.

SIRS,—Under the heading of "Death under Chloroform" we constantly read "the chloroform was administered in the usual way." I would ask what is the usual way: is it with or without an inhaler? Both ways cannot be "best," so which is? Is the percentage of deaths more or less with the inhaler, as compared with the percentage of deaths (if any) where chloroform is administered on the Edinburgh plan? The only inhalers I ever saw in Edinburgh were those which Sir Jas. Y. Simpson (ah! how many years ago) used to show on his lecture table as interesting relics of a bygone age. In England and America I have seen chloroform administered by inhalers, and without even after stertor had set in, which both Syme and Simpson taught all their pupils was an alarming "danger signal." We did not think a great deal about what quantity of chloroform we gave in those days, but the chloroform *towel* was pretty quickly removed if a suspicion of stertor occurred. I wonder a coroner's first question in all such cases is not, "Did you use an inhaler?"

I am, Sirs, yours faithfully,
R. WHITTINGTON LOWE, M.D. Edin.

Park-place, Nov. 4th, 1895.

*** The ambiguity of the expression is matter of regret. The "usual way" commonly means that chloroform is exhibited from a towel or piece of lint. The number of deaths in which the "open method" is employed largely exceeds that where an inhaler is used, but as the former plan is so much more frequently adopted it is impossible to trust to statistics in attempting to arrive at a decision upon the relative safety of the methods. There have been several deaths under the Edinburgh method, as indeed in the case of every known way of administering chloroform. The use of a towel-end is advocated in some places, but cannot be regarded as being exact since the amount of vapour which reaches the patient must depend upon varying quantities—e.g., the temperature of the room, the vigour of the respiration of the patient, the texture of the towel, &c. With many inhalers an

exact quantity of chloroform is evaporated in a given time and mixes in a known proportion with the inspired air; and, further, the proportion of chloroform can be lessened at will or can be maintained constant. This cannot be done with the rough-and-ready "open method." The teaching in London of Snow, Clover, and their followers has always been to regard "stertor" as an evidence of obstructed breathing, and to insist upon the extreme danger of that symptom. In no well taught London hospital would a student be permitted to continue the inhalation of chloroform to a stertorous patient.—ED. L.

"DUBLIN INFECTIOUS HOSPITALS SCHEME."

To the Editors of THE LANCET.

SIRS,—In reference to the above subject, permit me to make the following statements, which I submit to the judgment of your readers. 1. The draft scheme for providing isolation hospitals outside the city of Dublin was drafted by me and submitted to Mr. Stafford, the medical inspector of the Local Government Board of Ireland. Mr. Stafford amended the scheme and it was then submitted to and approved of by the Public Health Committee. 2. The scheme was submitted to a conference of representatives of the local sanitary authorities, and it was distinctly stated to them that the scheme could be modified in any way provided that provisions were made in it for establishing one or more hospitals for small-pox and a home for convalescents from infectious diseases outside the city. 3. In the draft scheme no reference is made to the existing Dublin hospitals, and a motion made at the conference to consider the question of the public money grants made to them was spoken against by me and was rejected. 4. In the recent small-pox epidemic there was not sufficient accommodation for the patients in the fever hospitals, and hundreds—chiefly convalescing cases—were obliged to go into the workhouse hospital. 5. The council of the Dublin Sanitary Association played a sorry part when they tried to stifle a scheme which was chiefly designed to provide a proper hospital for small-pox and a home for convalescents from infectious diseases. It is a new departure for a sanitary association to show solicitude for the ratepayers and apprehension that the establishment of isolation hospitals might interfere with medical education. 6. It is a pleasure to me to be able to state that at the beginning of our small-pox epidemic the authorities of the general hospitals at once agreed not to admit small-pox cases. I trust the time is not far off when they will extend the exclusion to a few other infectious diseases—scarlet fever and typhus fever, for example. There are in Dublin eight general hospitals (some of them with maternity departments) in which fever cases are received.—I am, Sirs, your obedient servant,

CHARLES A. CAMERON,
Superintendent Medical Officer of Health.

Public Health Office, Dublin, Nov. 2nd, 1895.

THE EFFECT OF CHRONIC NASAL OBSTRUCTION ON THE GROWING SKULLS OF YOUNG PERSONS.

To the Editors of THE LANCET.

SIRS,—Will you permit me to call attention to a point I have long insisted on—namely, the irreparable damage done to the growing upper maxillary bones, and consequently to the facial appearance, of young persons the subjects of chronic nasal obstruction? I have observed in a multitude of instances the constant association of narrow, flattened faces, pinched upper lips, highly arched palates, and crowded, irregular teeth with chronic nasal obstruction in one form or another, notably with deflected septa and turbinal hypertrophies and engorgements. Continental and American authors have frequently noticed this association, but apparently have not hit upon the relation of one to the other. For instance, Trendelenburg has pointed out the frequent association of highly arched palates with deflections of the nasal septum. Jarvis has reported a series of four cases in the same family, and thinks they are hereditary. Bosworth and many others have noticed the same association and have offered various explanations, none of which appear to me sufficient.

I venture to think Ziem has set the matter at rest by his experiments. Ziem has proved that every obstruction of the nose exerts widely spread consequences on the development of the skull in young animals, one of whose nostrils he completely closed up for a long time. There was seen a deviation of the intermaxillary bone and sagittal suture towards the shut-up side; also lesser length of the nasal bone, of the frontal bone, and of the horizontal plate of the palate bone; and less steep elevations of the alveolar processes; smaller distance between the anterior surface of the bony auditory capsule and the alveolar process, also between the zygomatic arch and supra-orbital border; and smaller size and asymmetrical position of the vascular and nerve canals on the closed side of the nose. The distance of the two orbits from the middle line was unequal, which, as has been observed in man, leads to asthenopia, astigmatism, and strabismus.

I am, Sirs, your obedient servant,

Harley-street, W., November, 1895. MAYO COLLIER.

"THE PHYSIOLOGY OF DEATH BY ELECTRIC SHOCK."

To the Editors of THE LANCET.

SIRS,—One result of the publication of my letter in your issue of Oct. 26th has been that a former pupil of mine (Mr. Charles H. Piesse) has done me the favour to send me a reference to an interesting paper in THE LANCET of Oct. 4th, 1890, by Mr. Percy Pope. For the benefit of those of your readers who may not be able to refer back to that number of THE LANCET I beg permission to state briefly the main points of the lucid narrative.

A number of soldiers at Aldershot were stationed under some small trees watching a cricket match when a sudden flash of lightning, like the bursting of a shell, was followed by cries for help from the men under one particular tree. Five men were found to have been more or less injured. No. 1, who had been sitting on the ground with his back against a tree from which a portion of bark had been stripped close to his head, was dead; the breathing and pulse had ceased and artificial respiration failed to revive him. No. 2 was quite unconscious; the respiration had ceased, but the pulse was still perceptible. "In this case artificial respiration was rewarded after some minutes by a gradual return to consciousness." Brandy was then given; he was removed to hospital and soon recovered. Nos. 3, 4, and 5 recovered consciousness without artificial respiration some few minutes after being struck. The state of the pulse and breathing during the brief unconscious period is not mentioned. All the four men were able to return to duty within a few days. It is remarkable that the man who was killed had no marks of injury on the head or face, but No. 2 had his hair singed, and there were marks of burning (like ecchymosis) on the left side of the face, neck, and upper part of the chest.

These cases afford interesting illustrations of three degrees of injury from lightning shock. No. 1 was fatally injured, with simultaneous arrest of the heart's action and breathing; No. 2 was unconscious, with suspended breathing, but was restored by artificial respiration; and Nos. 3, 4, and 5, temporarily unconscious, probably with suspended breathing, recovered from the shock without special assistance. The practical lesson is that *one man's life was saved by artificial respiration*. Some interesting particulars were given of the condition of the patients after the return of consciousness, but with these I need not occupy your space.

I am, Sirs, yours faithfully,

Savile-row, Nov. 4th, 1895. GEORGE JOHNSON.

"A VERY EFFECTUAL METHOD OF TREATING MALIGNANT DISEASE OF THE BREAST."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Oct. 12th, 1895, under the above heading, appears an article by Mr. Arbuthnot Lane. I have on two occasions performed an operation exactly similar to the one he describes for recurrent scirrhus of the breast, with the exception that the third part of the subclavian

artery in my cases was tied without preliminary resection of the clavicle. Both of these patients recovered from the operation. The first case was operated upon on May 30th, 1893, and full notes of the condition and operation are published in the Edinburgh Hospital Reports for 1894, page 480. This patient died in August, 1894, and I am indebted to Dr. Herbert E. Hick of Bradford, under whose care she was, for a note of her condition when she died. He says: "The operation was a complete success, as up to the time of her death there was no sign of recurrence of the disease in the neighbourhood of the scar." She died from a rapidly growing malignant tumour of the stomach. The second case has been operated upon too recently to make any further note of it useful, but so far as I can judge the whole of the diseased structures were excised, and this would have been impossible by any other method.

I am, Sirs, yours faithfully,

RUTHERFORD MORISON.

Saville-row, Newcastle-on-Tyne, Nov. 5th, 1895.

"THERAPEUTIC VALUE OF INTESTINAL ASEPSIS."

To the Editors of THE LANCET.

SIRS,—I read with great interest Dr. Williams's paper on the treatment of typhoid fever by the chlorine mixture. The only drawback I have found is the difficulty patients have in taking it; in several of my cases it has produced retching for some time afterwards. The mixture has invariably brought down the temperature, and with the above exception has generally improved symptoms. With regard to sulphurous acid, patients take it well and with the best results. The dose I generally prescribe is half a drachm to one drachm freely diluted with water, every three or four hours.

I am, Sirs, yours truly,

Khedive-road, Upton, Nov. 2nd, 1895. E. H. BLAKE.

To the Editors of THE LANCET.

SIRS,—Dr. Burney Yeo has drawn my attention to a mistake I made in attributing to him the first use of the chlorine treatment in "typhoid" &c., and has referred me to his book, in which I should find references to "Watson, Murchison, and others." I see that Dr. Williams speaks of the benefit of this treatment as "recommended" by Dr. Yeo. I take this opportunity, in common fairness to Dr. Yeo, of making this statement. I am, Sirs, yours truly,

Harrow-road, Nov. 5th, 1895. A. L. GRIFFITH.

"THE ADMINISTRATION OF OATHS IN COURTS OF LAW."

To the Editors of THE LANCET.

SIRS,—The quotation given by Dr. Bullock is also given in Notes and Queries, Fourth Series, Vol. X., p. 119. I believe it was the practice to lay the hand upon the book "*tactis sacro-sanctis Dei evangeliis.*" The same publication mentions other curious facts in connexion with oath-taking, one being that in certain parts of Ireland it was formerly considered unlucky for a pregnant woman to take an oath within a certain period of her delivery. But no mention is made of the date when "kissing the book" first began, though this question was specifically asked by a correspondent twenty-three years ago. The Scotch oath is also mentioned, but no reason is given for the different mode of adjuration in England, Wales, and Ireland on the one hand, and in Scotland and the Channel Islands on the other. Can any of your readers help us to discover this?

I am, Sirs, yours faithfully,

Liverpool, Nov. 4th, 1895. FRED. W. LOWNDES.

THE INFLUENCE OF HOT AND COLD DRINKS ON THE TEMPERATURE IN THE MOUTH.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Oct. 26th Dr. Lazarus Barlow drew attention to the influence of hot and cold drinks on the temperature in the mouth. I have often thought that one might easily be misled if the temperature were taken in the mouth too soon after food. Two instances which have recently occurred to me show this. A few weeks ago I saw a boy suffering from tonsillitis. His mother, a few minutes before my arrival, had taken his temperature in the mouth and found it to be 102° F. I took it in the mouth and found it to be 100°. Our thermometers were tested and found to agree. On inquiry I found that he had had some hot beef-tea just before his mother took his temperature. The second instance occurred yesterday, when I saw a boy who had symptoms of influenza. Immediately on going into the room I put my thermometer in his mouth, when it registered 104°. Doubting the accuracy of this, I put it under his arm and found it registered 99°. After waiting a little while I put it in his mouth again, and found it registered 100·2°. Just before my arrival he had taken a glass of very hot milk. These two cases show how easily one may be deceived if one trusts entirely to the thermometer.

I am, Sirs, yours faithfully,

Bedford, Nov. 6th, 1895. W. GIFFORD NASH.

"BERI-BERI."

To the Editors of THE LANCET.

SIRS,—I notice in THE LANCET of Sept. 21st a letter with the above heading which may possibly lead to some misconception, as the disease described—which is a very common and troublesome one among tea garden coolies, and of which Dr. Sheperd has given a perfectly correct account—is certainly not beri-beri but anchylostomiasis. There are intense anæmia and hydræmia, but none of the characteristic symptoms of beri-beri — no peripheral neuritis or any affection of the great nerves supplying the heart and lungs. It has certainly for a long time been known locally as beri-beri, owing, doubtless, to some misconception on the part of the practitioners who saw the earlier cases. The appearance of the patients is characteristic, but if any doubt exists as to the diagnosis of a particular case a simple microscopic examination of the fæces will, if they are present, instantly reveal the large non-operculated segmented ova without the trouble of washing out the worms. There is a delicate shell having a single contour, non-operculated, enclosing a segmented yelk separated from the shell by a colourless fluid. A good illustration of this and other intestinal ova will be found in "Davidson's Hygiene and Diseases of Warm Climates." With regard to the administration of thymol, I have never had any bad symptoms, even in delicate children, and I have given it to babies six months old. The proper way to administer it is dry, in which case very little is absorbed and the worm gets the full benefit of the dose. The effect of thirty grains given in ten-grain doses at four hours' interval is often magical, the anasarca disappearing before other treatment can be resorted to. I have never seen the slightest mental disturbance. A certain proportion of the cases are inveterate, and it will generally be found that these are earth-eaters. The coolies themselves recognise this. The curious part of it is that they cook the earth. I have never been able to discover the worm embryo or egg in earth or water, but have little doubt it develops in the soil. I do not know whether the disease is prevalent among the indigenous local population (the coolies are all imported and live under special local conditions), but I fancy not. I quite recognise the force of Dr. Sheperd's remarks as to the importance of the early recognition of the disease in ship's crews, emigrant coolies, and others, but must emphasise my objections to having thus easily cured disease confounded even verbally with such a serious disorder as beri-beri. A confusion of terms easily leads to confusion of diagnosis. I should be much obliged if any of your readers could give me an account, clinical, nosological, &c., of the disease known as "kala azar" which is so prevalent in some parts of Assam. I shall be happy, if you wish, to send you specimens and microphotographs of the eggs.

I am, Sirs, yours truly,

CHAS. E. SEAL, M.R.C.S.

Chundiechena Tea Estate, S. Sylhet, Oct. 11th, 1895.

PRESENTATION. — Mr. Algernon Sudlow, M.R.C.S., of Castle-Combe, Chippenham, has been presented by his friends, on retirement from the profession after forty-three years' practice in that village, with an illuminated address and a cheque for £150. The presentation was made, on behalf of the subscribers, by Sir A. Neeld, the high sheriff.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Hospital Sunday.

THE amount collected on Oct. 27th reached the sum of £4264 9*s.* 3*d.*, which goes this year to the General Hospital.

Hospital Saturday.

The annual reunion of the patients of the convalescent homes at Tyn-y-Coed and Marle Hall took place in the town hall on the 4th inst. The object is to keep up the interest of those who have passed through the homes in the Hospital Saturday movement. Over 3000 invitations were issued, of which some 250 were returned through the dead letter office on account of change of residence. Up to the present time, the fourth annual meeting, 2075 men and 586 women have passed through the two homes. Mr. Smedley, the President, claimed for the homes that they would bear comparison with any similar institutions in the country for their surroundings and appointments, for the liberality of the fare, and for the advantages which the patients enjoyed. A presentation of a writing table was made to Dr. Woodhouse, one of the honorary surgeons, and a similar gift to Mrs. Woodhouse. The police band rendered efficient service, and a pleasant evening was spent.

Medical Mission.

The twentieth annual meeting of the Birmingham Medical Mission was held on Oct. 24th. The report stated that the past year had been one of unusual activity. The number of patients treated was the largest there had been, 5832 having received the benefits of the mission. The consultations given at the stations and at the homes of the poor were 26,698, while the staff consisted of one medical man, an apothecary, a general helper, and one nurse. It may be inferred from this that much energy must have been displayed, and that very little spare time was available. The cost per patient was about 2*s.* 6*d.* When the distress of last winter was at its height about 250 families were daily relieved, and breakfast for 180 was provided three times a week to the sick poor. Garments, boots, and shoes were also distributed. The income was £858 18*s.* 7*d.*, and after payment of expenses a balance of £134 remained in hand.

The Burial of Stillborn Children.

In a former note the discovery of unburied stillborn children in a house in the town was alluded to. The city coroner, Mr. Oliver Pemberton, in holding an inquest upon the bodies, made some valuable suggestions as to dealing with such cases. He proposed that the parents of such children shall be required to give notice within a specified time to the registrar of the district; that the registrar shall record this and give an order for burial, which shall take place within a given time; also that the registration shall be made in the books at the cemetery. In case of undue delay notice shall be given to the police authorities, and it shall be unlawful for undertakers or other persons to keep the bodies of stillborn children on their premises other than a reasonable time before burial. If these recommendations are carried out they will go far to prevent the laxity and carelessness which are common in dealing with this evil, a prevalent one unfortunately in all large towns.

Obesity and Old Age.

That this combination is capable of existing was lately proved at Cradley Heath by the death of a resident at the advanced age of eighty-four. He weighed 26 st., and for over fifty years kept a well-known public-house in the district. Some drawbacks evidently attended his career, for he was unable to move about much and had to be hoisted up into his bed at night. Nevertheless, his long life and great weight did not interfere with his conduct of business or hinder his ordinary enjoyment.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Manchester and Salford Sanitary Association.

AT the last meeting of the committee a suggestion made by Dr. Niven in his annual report on the health of Manchester, with reference to securing a milk-supply of guaranteed purity through the agency of a company or association, was considered and referred to a standing committee. The question of poisoning by carbolic acid was also introduced with a view to an effort being made to get it scheduled as a poison, but action was deferred till certain statistics could be obtained. The subject of accidents owing to the use of inferior oils and of badly constructed lamps was next considered, and it was decided to memorialise the Home Secretary with reference to having the standard flashing point raised for illuminating oils. It is said that in the United States, notwithstanding the great use of oil lamps and stoves, comparatively few explosions take place, owing no doubt to the fact that the flashing point of the oil used is so much higher than it is in this country.

Children's Holiday Fund.

The object of this most useful charity, which held its annual meeting the other day, is to send poor children into the country for a three weeks' holiday. The report gave a somewhat discouraging view of its position. Whatever the cause—whether due to the general and long-continued depression of trade (from which, however, we are now said to be recovering) or to a growing indifference to suffering and misfortune—the fact remains that hospitals and charities of all kinds have for some time told the same story of crippled means. In the present case it is stated that the committee began their work this year with an adverse balance of £286 and a falling off in the subscriptions, so they had been unable to give a holiday to the usual number. This led to their sending "only delicate children or such as absolutely required a change." Thanks were given to the medical men who had examined the children and given the necessary certificates before they were sent to the country, and to the Manchester press for their references to the work done by the society. The honorary treasurer, in moving the adoption of the report, said the committee deeply regretted that they had to curtail their work. Last year more than 1200 children were sent for a holiday, while this year the number had fallen to 385. The Lady Mayoress, who occupied the chair, commended the society's work and hoped the coming year would bring increased funds.

Manchester Edinburgh University Club.

The members of this club had their annual dinner on the 21st ult. Though open to all professions, that of medicine is most numerously represented. The guest of the evening was the Rev. John Watson of Liverpool, better known perhaps as "Ian Maclaren," the author of "Beside the Bonnie Briar Bush." When speaking in response to the toast of his health, Mr. Watson referred to some remarks made by its proposer as to the tribute he had paid in his book to the medical profession. He had tried, he said, to express the feeling of gratitude which he believed every person in the community, but especially people who lived in country districts, and most of all country clergy, had for the country members of the medical profession. He had said nothing in his book "which could not be verified in actual lives known to himself and to other men."

The Vegetarians.

The forty-eighth annual meeting of the Vegetarian Society was held here on the 21st ult. A paper was read by Miss Eccles, in which it was contended that vegetarianism was nothing if not religious, and that man "could not possess the simple virtues justice and honesty in their fulness while he deprived those whose right was equal to his own of the blessing of life, dearest to all of them as to him." Mr. A. W. Malcomson followed with a paper on the Æsthetic in Food, in which he urged that eating and drinking could be refined and elevated by the beauty of simplicity and purity. "Vegetarians had become possessed of a perception of what was true and beautiful and what was false and hideous in the matter of food. The occupation of a butcher and slaughterman was ostracised and debarred from all poetry and romance, all beauty, all æstheticism. No one of refined and cultured tastes, certainly no æsthete, would ever choose it"! A public meeting was held in the evening, at which a lady presided who was a Grand Vice Templar, I.O.G.T.—whatever that may be. Stress was laid on the importance of fruit culture, and it was contended that it did not receive sufficient recognition or assistance from Government and that everything should be done for the encouragement of British fruit culture. One gentleman said he once visited all the fruiterers' shops in Chester and could get no British-grown apples, though there were plenty of foreign ones. I am afraid that is very much the fault of the growers, who

keep to their old inferior kinds, and if they have a good sort it is not well grown, is badly selected, badly packed, and offered in a less attractive condition than its foreign rival. Spade culture was advocated as opposed to the plough, especially the steam plough. It seems that many social and economic difficulties would vanish if vegetarianism prevailed. A member of Parliament of that cult was wanted to put before its members from a vegetarian standpoint "the great problem of taking labour from the congested towns to happy and healthy life on the land." Professor Mayor of Cambridge, the President of the society, said that when he first remembered Cheshire farm-houses a visitor was never offered anything purchased at a shop—it was all home-made. Now all this was reversed. Mr. Axon of Manchester, a veteran in the cause, was very enthusiastic, saying it was not merely a system of dietetics, but "something that contributed to the simplification of life, to the elevation of morals, to the improvement of life generally, and to all good causes whatsoever. ..... It was the sister of all other good movements—of peace societies, purity societies, and thrift societies. The adoption of the vegetarian system by the nation would solve a great many of those grave and pressing problems which were perplexing alike statesmen and moralists all over England and Europe." This enthusiasm is harmless, and perhaps to a certain extent useful, in a nation of beef-eaters, while the vegetarians are to be congratulated on the happiness they evidently feel in being "so very superior."

Nov. 5th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

St. Oswald's Home for Friendless Girls.

THE foundation-stone of this valuable institution was laid at Cullercoats last week by Mrs. J. R. Burn, in the presence of the Bishop of Newcastle, a number of local clergymen, and others. The building is to cost £5600, of which sum Mr. J. R. Burn, with his usual liberality, has contributed £2000. The Society for Providing Homes for Waifs and Strays provides £500. The house will contain accommodation for fifty children. It is a Church of England institution.

Cruelty to Children.

Hardly a week passes without the Society for the Prevention of Cruelty to Children bringing before the magistrates in this neighbourhood cases revealing shocking neglect of children by drunken parents. Mr. Barnado says that some of the worst examples of child degradation he has met with come from Newcastle-on-Tyne. A few days ago a man and his wife were charged with exposing and neglecting their three children aged four years, two years, and six months respectively. Inspector Appleton found them all lying in an old pay office six feet square, on a miserable mattress, with only a few rags to covert hem. The children were benumbed with cold. The place was full of rags, bones, and pieces of old iron. They had slept there for four or five weeks. The infant had been born in an old coal-house. The father and mother were both drunkards. The infant weighed 9 lb. The bench sent the parents to gaol and removed the elder children permanently from their custody.

Amateur Operetta by Children.

A new operetta, *The Demon Spider*, by Miss E. G. Simpson, a grand-daughter of a well-known local medical man, and Mr. M. E. Lawson, was performed in the Art Gallery, Newcastle, on Wednesday, Oct. 30th, for the benefit of the Royal Infirmary. The house was crowded. The characters were all taken by children, and Mr. J. H. Beer, in the absence of Mr. Lawson, kindly conducted.

The Tyne Port Sanitary Authority.

At a meeting to-day of the Tyne port sanitary authority it was arranged to advertise for a medical officer in the place of Dr. H. E. Armstrong. The duties were defined and the salary fixed at £150 per annum, the officer to reside at the mouth of the river. It was suggested that Dr. H. E. Armstrong should be asked to accept the appointment of consulting medical officer, and in the public interest it is to be hoped this suggestion will be accepted, for there can be no doubt that the experience of Dr. H. E. Armstrong would be most valuable.

Tynemouth Victoria Jubilee Infirmary.

A cheque for £2000 has been received by the chairman of the above-named charity from Mr. R. T. Donkin, M.P., for the purpose of completing the hospital by the building of a new wing and a porter's lodge, and providing furniture. This generous gift of the member for the borough will be thoroughly appreciated by the inhabitants of Tynemouth.

Newcastle-on-Tyne, Nov. 4th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

The Prosecutions by the Pharmaceutical Society.

REFERENCE has already been made to prosecutions, at the instance of the Pharmaceutical Society of Great Britain, against various persons charged with contravening the Pharmacy Act, 1868. Two of these cases were carried from the Sheriff's Court to the Justiciary Appeal Court. One of the cases was against Mr. Hume of Edinburgh, who designated himself a "scientific instrument maker and technical chemist" and a "photographic chemist." The other was against Mr. Turnbull, and the question raised in his case was whether he had committed the offence of keeping open shop for the retailing, dispensing, or compounding of poison. Lord Trayner, in dealing with Mr. Hume's case, recognised the difficulty of the case. The Act had been passed for the safety of the public and forbids anyone keeping open shop for retailing poisons or using the title of chemist unless qualified and registered as the statute provided. He considered that the title "technical chemist" was within the statutory prohibition. The title of chemist was used in connexion with premises in which poisons were sold in small quantities, and the public, for whose safety and protection the Act was passed, were more likely than not to regard the title "chemist" without paying any attention to, or perhaps understanding, the qualification "technical." That the prefix of a qualifying adjective to the title chemist or druggist did not take the person using such title out of the statutory prohibition had been decided in England, where "botanical chemist" and "shipping druggist" had been treated as contraventions of the statute. Had these English decisions been to a contrary effect his lordship would not have dissented from them. They would then, he must admit, have been more in accordance with the inclination of his own mind. It was not desirable, however, that an imperial statute should be interpreted differently in different parts of the kingdom, and he was, therefore, prepared to follow them and decide accordingly. In doing so his lordship was doing the respondent no wrong or even putting him to any serious inconvenience, while he was only affording to the public the protection which this statute intended. With regard to the other case, he held that the shop in question was the respondent's shop, and it was certainly kept open, *inter alia*, for the sale of poisons in small quantities. The other two judges concurred in this finding. The agent for the Pharmaceutical Society did not ask for expenses, and stated that the society only wanted the point decided. The Lord Justice Clerk approved of this, as there was nothing whatever against the character of either of the respondents. They had not acted in a surreptitious manner at all. It was only technically that the court were obliged to come to the judgment they did.

Opening of the Royal Edinburgh Hospital for Sick Children.

On Thursday last week the new buildings of the Royal Edinburgh Hospital for Sick Children were opened by Her Royal Highness Princess Beatrice, who had travelled, accompanied by Prince Henry of Battenberg, from Balmoral for this purpose. Owing to the limited accommodation at the hospital comparatively few invitations were issued for the ceremony, even the staff of the Royal Infirmary not being honoured with them. After the usual preliminaries and the formal "I declare this hospital open," Her Royal Highness was conducted over the hospital. At each of the wards the Princess was asked to hand to each of the nurses a silver badge commemorative of the occasion. These badges were the gift of the physicians and surgeons to the hospital. The Princess named one of the wards the "Beatrice" ward. The old Sick Children's Hospital was situated in Lauriston-lane, but it was demolished a few years ago and the site sold to the Royal Infirmary for its extension. Since that time a building at Morningside has been used as a temporary hospital. The

new hospital is situated on the south side of the meadows, within five to ten minutes' walk of the Royal Infirmary and the Medical School. The building is in the form of the letter E, the central block containing the administrative department, kitchen, and servants and nurses' bedrooms, as well as the medical and surgical theatres. The two arms of the building run southwards and are three storeys in height. The ground and first floors contain general wards, while the upper floors are devoted to observation, isolation, and spare wards. The four principal wards contain twenty-four cots each, the total accommodation in the hospital being 118 beds. The flooring of the wards is of teak, and the walls are finished with Parian cement polished to a smooth surface. The angles of walls and ceilings are rounded, and all ornamentation is excluded so as to avoid ledges for the harbouring of dust and microbes. Attached to the main building are an out-patients' department, mortuary, and pathological rooms, and laundry buildings. The hospital has been erected at a cost of £40,000, and seems on the whole to be a satisfactory example of the special type of hospital construction.

Edinburgh Royal Infirmary.

At the meeting of the managers of the Edinburgh Royal Infirmary on Monday a long discussion took place with reference to a sum of about £70,000 which shortly is to be paid into the coffers of the institution. It was decided that part of this money should go to wipe out the whole debt on the infirmary, which amounts to about £40,000.

The Presidency of the Royal College of Surgeons of Edinburgh.

Emeritus Professor Struthers has been elected President of the Edinburgh Royal College of Surgeons. The new president is a Fellow of some fifty years' standing.

Glasgow University.

The winter session was this year opened without any formal introductory address. At the first meeting of the class of physiology Dr. McKendrick gave an account of the work of Carl Ludwig, and discussed the limitations attending the application of physical methods of research to the problems of physiology. Professor Coats addressed his class on Ludwig and Pasteur, and claimed that the personal characters of these men of science formed a complete refutation of the statement that vivisection exercised a degrading and immoral influence on those who practised it. Professor Coats has been elected Honorary President of the Students' Medico-Chirurgical Society and has delivered an address on Immunity to Infective Diseases, Natural and Acquired. Mr. Jas. Carslaw, M.B., has been appointed Assistant to the Professor of Medicine, and Mr. Hugh Galt, M.B., Assistant to the Professor of Medical Jurisprudence. Dr. Fraser Harris is to show to the Glasgow Philosophical Society a new optical instrument known as the stereo-photo-chromoscope, the aim of which is to photograph an object in such a way that the "positive" of the picture, viewed as a transparency, will present the object with its natural colours and also with stereoscopic effects. At the meeting of the General Council on the 30th ult. considerable dissatisfaction was expressed at some of the recent Ordinances of the Universities Commission, and the opinion of several speakers, including Dr. McVail, seemed to be that the sooner the Commission was dissolved the better for the Scottish universities. Dr. McVail and the Rev. Dr. King have been re-elected as the representatives of the Council on the University Court for a further term of four years.

New Convalescent Houses for Murthly Asylum.

Two new convalescent houses have recently been erected by the Perth District Board of Lunacy, the object being to separate patients, who have to a considerable extent recovered, from association with those in whom mental disorder is still pronounced. The formal opening of the new houses took place on the 2nd inst., Lord Belvaird handing over the key of the new houses to Dr. G. M. Robertson, the medical superintendent. The visitors, amongst whom were Lord Provost Dewar of Perth and Dr. Yellowlees of Glasgow, were afterwards entertained to luncheon.

Gaelic Society of Glasgow.

At the opening meeting of this society the President, Dr. Campbell Black, delivered an address on Some Traces of Eastern Mythology in certain Celtic Superstitions.

Glasgow and the British Institute of Public Health.

The Institute has accepted an invitation from the corporation to hold their annual meeting next year in Glasgow, and a committee has been appointed to make the arrangements necessary for their reception.

Glasgow Obstetrical and Gynæcological Society.

At the first meeting of the session, held in the Faculty Hall, St. Vincent-street, on Oct. 30th, the following office-bearers were elected:—Honorary President: Sir John Williams, Bart., London. President: G. A. Turner, M.D. Senior Vice-President: Malcolm Black, M.D.; Junior Vice-President: J. Nigel Stark, M.B. Treasurer: Alexander Miller, L.R.C.P. & S. Secretary: Robert Jardine, M.D. Reporting Secretary: A. W. Russell, M.D. Pathologist: John Lindsay, M.B. Members of Council: Dr. Kelly, Dr. Cullen, Dr. Gunn, Dr. Jenkins, Dr. Reid, and Dr. Munro Kerr.

Glasgow Medico-Chirurgical Society.

At a meeting of this society on the 1st inst. Dr. Jas. A. Adams showed—(1) a woman on whom he had successfully performed excision of the pylorus for malignant disease; and (2) a patient who had suffered from a large ventral hernia which had been successfully operated on. Mr. A. E. Maylard showed—(1) a child on whom an inguinal colotomy had been performed for imperforate rectum; and (2) a boy who, as the result of a fall on the head, suffered from paralysis of the right upper limb and right facial spasm, these symptoms having been removed by trephining over the corresponding motor areas on the left side, with removal of a blood-clot which was situated between the dura mater and the bone.

Faculty of Physicians and Surgeons of Glasgow.

Dr. Bruce Goff has been re-elected President, Dr. James Dunlop Visitor, and Dr. James Finlayson Honorary Librarian to the Faculty.

Lifeboat Demonstration at Paisley.

An inaugural demonstration in aid of the Lifeboat Fund took place in Paisley on the 2nd inst., and some of the members of the medical profession took an energetic part in securing its success. Thus the chief marshal of the procession through the streets of the town was Mr. James Wallace, surgeon-dentist, who had for his principal assistants Dr. W. Wallace and Dr. R. Brownridge.

Aberdeen University.

At the meeting of the University Court held on Monday, Nov. 4th, the Lord Rector read a letter which he had received from Mr. C. W. Mitchell, who said he was pleased to hear that the University Court had decided to proceed with the North Tower of Marischal College. In his letter Mr. Mitchell quotes from a letter to Sir W. Geddes written by the late Dr. Mitchell, who said: "Lord Huntly, I believe, is endeavouring to raise a special fund of £20,000, and if £6000 of that amount can be collected soon, I would be prepared to contribute an additional £4000; further, if his lordship can increase his collection to £10,000, I will increase my subscription to £6000, thus making up the required £16,000 without appeal to the Government." "I now beg to confirm this offer," writes Mr. Mitchell, "subject to the consideration that your lordship's £6000 is collected by Jan. 1st, 1896, and the additional £4000 by May 1st." Lord Huntly said they were exceedingly grateful to Mr. C. W. Mitchell for so generously and nobly coming forward to homologate the wishes of his father, and he moved that the letters be referred to the executive committee with the request to take the necessary steps to raise the money and issue an appeal. This motion was seconded by Sir W. Geddes and agreed to.

Lord Provost Stewart's term of office has now expired, and as he is *ex officio* a member of the University Court this was his last meeting. The Lord Rector, on behalf of the members of the Court, expressed their regret at losing a member who took such a keen and practical interest in the progress of the University. At the same meeting the Court appointed to the Fordyce Lectureship in Agriculture Mr. James Wilson, M.A., B.Sc., who is at present Lecturer in Agriculture at the University College of Wales, Aberystwith. Mr. Wilson will take up duty on Jan. 1st next.

Nov. 5th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Annual Distribution of Prizes at the Royal College of Surgeons in Ireland.

On Monday last the annual distribution of prizes for the session 1894-1895 took place in the hall of the college. Sir

W. Thornley Stoker, president of the college, who presided, addressed the students in eloquent terms and concluded by assuring them that he was in grave earnest when urging them to take enough relaxation in view of the severe routine of the medical education of to-day.

The Belfast Children's Hospitals' Staff Dinner.

On Tuesday, Oct. 29th, the medical and surgical staff (consulting and acting) of the Belfast Hospital for Sick Children, and of the Ulster Hospital for Women and Children, dined together at Thompson's Restaurant, Belfast. Including guests there were between thirty and forty present. Mr. John Fagan, F.R.C.S.I. (consulting surgeon to the Belfast Hospital for Sick Children), occupied the chair and proposed the special toast of the evening, "The Medical and Surgical Staffs of the two Children's Hospitals." He referred to the very happy feeling that existed between the two rival institutions, the ambition of both being to do the utmost possible good. He spoke of his own efforts in founding the first children's hospital in Belfast. Dr. McCaw of the Queen-street Hospital, and Dr. Calwell of the Mountpottinger Hospital, replied. A very pleasant programme of music was supplied by Dr. J. A. Lindsay, Dr. McCaw, Dr. McKisack, and Dr. Leslie.

Opening of the Medical Session.

The present winter session in the Belfast Medical School began on Oct. 29th at the college, when the professors commenced to lecture; and at the Royal Hospital on Thursday, Oct. 31st, when Dr. A. B. Mitchell, assistant surgeon, gave an inaugural address to the students on their duties, which was received with great favour. There was a very large attendance of the medical staff and of the students in the theatre, which has been enlarged, and which, when the new aseptic appliances are put in, will be in every respect an admirable operating-room.

The Notification of Infectious Diseases.

At a meeting of the Belfast Corporation, held on Nov. 1st, the Public Health Committee in their report again reaffirmed their opinion that the time has come when a thoroughly equipped hospital for the isolation and treatment of citizens suffering from infectious disease should be provided for the city of Belfast, and that such hospital should consist of not less than sixty beds, at an annual cost of £30 per bed (£1800). They were also in favour of the Notification of Infectious Diseases Act being adopted. The chairman of the Public Health Committee (Alderman Graham, M.D.) said that in Belfast 223 cases of infectious disease were notified during the last month (only a moiety of those actually occurring), and yet of these only 31 were treated in hospital. Of these cases 110 were scarlet fever, and yet only 10 of them were treated in hospital. The death-rate from zymotic diseases in Belfast was greater than in any other large town in the three kingdoms. Last year it was 4·10, while in Dublin it was only 2·4. The hospital, Dr. Graham thought, would not cost more than about £2700 each year. After considerable discussion, an amendment that the report be adopted, omitting the questions of the infectious hospital and of the Notification Act, was lost by 16 to 8 votes. The reasons which are advanced against the course recommended by the Public Health Committee are two: first, the increased expense, necessitating more taxation; and, secondly, the fact that the notification of infectious diseases would have to be made to the dispensary medical officers, who, in each of their districts, are the health officers, and not to the medical superintendent of the city. This arrangement, in case the Act is adopted, will have to be altered so that there will be one principal central health officer to whom notification can be made, and not a divided authority.

The Health of Belfast.

At the present time the health of the city of Belfast is very bad. The last reported death-rate was 23·1 per 1000, while last year at the same time it was only 17·7. In zymotic diseases, chest affections, and in the total from all causes, the deaths are largely in excess of the normal. The cases of infectious disease are more numerous than ever previously noted. Scarlet fever is very prevalent in every district of the town; the cases of typhoid fever are also very numerous, and measles has reappeared. With existing arrangements, neither isolation nor proper treatment of infectious disease can be enforced. The cases returned to the city medical officer of health are only those occurring amongst the poorer classes; he knows nothing as to the prevalence of infectious disease amongst the well-to-do people. Until the Notification of Infectious Diseases Act is put in force, and a new hospital built for the treatment of such cases, epidemics of scarlet fever or typhoid fever cannot possibly be dealt with in Belfast.

Night Nursing at the Ballycastle Workhouse.

The Ballycastle Board of Guardians having by fifteen votes to four declined to appoint a competent night-nurse, notwithstanding that their own medical officer reported that such an appointment was absolutely necessary, the Local Government Board wrote stating that if the guardians did not take the necessary steps to appoint a competent trained night-nurse they would issue a sealed order placing the management of the workhouse in the hands of law officers. As a result of this threat the board, on Nov. 2nd, decided to advertise for a trained nurse with a knowledge of midwifery, at a salary of £20 per annum, with rations and apartments.

A Hospital Sunday for Belfast.

At a meeting of clergymen representing the various religious denominations, held on Nov. 4th, it was decided that the last Sunday in November shall henceforth be held as Hospital Sunday, the day chosen for collection in the churches of Belfast on behalf of the Royal Hospital.

Larne Water-supply.

The engineer employed by the Larne town commissioners reports that the present supply from the Sallagh springs is quite ample if stored. The reservoir will hold 9,500,000 gallons, and its elevation will command the highest house in Larne. The engineer gives particulars of new works required and estimates the total cost at about £4200. The matter is not yet finally settled, but it is hoped that such an important seaside resort as Larne will soon be provided with an adequate water-supply.

Proposed Increase of Salary for the Visiting Medical Officers of the Cork Union Hospital.

Some months ago the guardians of the Cork Union decided on increasing the salaries of the visiting physicians to the Cork Union Hospital by £25 a year each, but the Local Government Board wrote refusing their consent. Last week the guardians unanimously passed a resolution expressing their entire approval of the manner in which the medical officers have discharged their duties and urging that in the interests of the ratepayers a salary of £125 a year ought to be paid to each of the medical gentlemen. It remains to be seen whether the members of the Local Government Board residing in Dublin will consider that they are the most competent judges as to what is best for the Cork ratepayers and for the sick poor in the Cork Union hospitals.

The Annual Dinner of the Cork Medico-Chirurgical Association.

The annual dinner of the members of this association was held at the Imperial Hotel on Saturday last, and was a great success. Dr. Giusani, president of the association, was in the chair. A number of toasts were proposed and responded to, and a very enjoyable evening was spent, music and song forming an important part of the programme. These social reunions do much to bind the members of the medical profession together, and just now union is everything to the Cork men.

Nov. 5th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Statistics of Hernia.

PROFESSOR BERGER of the Paris Faculty furnishes us[1] with the result of his examination of some 10,000 patients who applied for trusses at the Bureau Central from Feb. 4th, 1881, to Aug. 11th, 1884. The information thus gathered differs materially in many respects from that currently met with in standard works, and for which Malgaigne and the Truss Society of London are responsible. The applicants consisted of 7433 males and 2534 females (or three males to one female). Of the males of all ages affected with simple or multiple hernia 96 per cent. have the inguinal variety. Of 6220 hernia in the male, 4526 were double inguinal and 1042 simple inguinal (or 4·34 double to 1 single). This is in direct contradiction to all known statistics, and goes to prove

[1] French Surgical Congress, 1895.

that in the immense majority of cases inguinal hernia is a double process pursuing a synchronous or successive evolution on the two sides of the body in the same individual. Right inguinal herniæ are to left as 1·46 to 1. In bilateral inguinal hernia the right and left swellings are equal in volume to 42·2 per cent. in adults and 65·03 per cent. in adolescents, when irregularity exists the right is generally larger than the left. Many cases of budding (small) hernia escape observation, so much so that double hernia is even more common than would appear from the above figures. It is impossible in every case to assert the congenital origin of a hernia. In only 479 instances (216 above and 263 below fifteen years, 166 being complicated with testicular ectopia and forty-eight with other congenital malformations) was Professor Berger able to do this. The right side offers a manifest predisposition for the congenital form which is very rarely bilateral. The funicular variety (Birkett's "hernia into the funicular portion of the vaginal process of the peritoneum"), which is very frequent, is indistinguishable from acquired hernia. There are no certain means of distinguishing in the living subject direct inguinal from external oblique hernia. In females simple or double inguinal hernia alone, or associated with other varieties, occurs in 44·6 per cent.; the simple is about thrice more common than the double in infancy, but only twice as frequent in adolescence and maturity. Femoral hernia is rare in hernial males (6·6 per cent.), and it is in the majority of instances associated with other varieties, almost invariably the inguinal. Double is about as frequent as simple femoral hernia; right femoral is rather more commonly met with than the left. In females only 37·1 per cent. of hernial subjects have femoral hernia; *crural hernia in females is, therefore, less common than inguinal hernia* (1 to 1·35). In a certain number of cases the crural hernia escapes directly *in front of* the femoral vessels. The association of an inguinal hernia on one side, with a femoral hernia on the other, is sufficiently common, especially in the male (most commonly right femoral with left inguinal). Professor Berger has met with 207 examples in the male and only 19 in the female of uni- or bilateral co-existence of femoral and inguinal hernia. The most frequent combination is inguinal and femoral on one side with inguinal on the other (69 cases). Of herniæ in the male, 5·46 per cent. are *umbilical;* in the female, 27·34 per cent. Above fifteen years of age umbilical hernia in the male is almost always associated with other varieties (119 cases out of 134); below that age it co-exists with single or bilateral inguinal hernia in rather less than half the cases. In the woman umbilical hernia is invariably unaccompanied with other varieties. In the infant of either sex it is frequently associated with sub-umbilical eventration. Hernia through the linea alba and epigastric hernia are more commonly met with than is generally believed. Of the total number of herniæ, they represent 1·37 per cent. (Macready's figures are 0·096 per cent.). They are much more common in the male than in the female; they are sometimes multiple (Professor Berger has seen four superposed herniæ through the linea alba), and seem to be the remains of the aplasia of the linea alba which constitutes in the infant sub-umbilical eventration. Twenty-nine laparoceles in the female, and only 9 in the male, 1 case of obturator hernia, 2 of lumbar hernia, 4 hypogastric and 4 cicatricial herniæ make up, with the preceding, 13,483 herniæ noted in 7433 males of all ages; 2534 female subjects furnished only 3317 herniæ. The proportion of herniæ to the subjects of them are in the male sex 2 to 1, and in the female sex 1·3 to 1. Professor Berger calculates that in the Department of the Seine there is for every 14·9 males, for every 44·7 females, and for every 22·3 of all ages and sexes, 1 affected with hernia. In the male the frequency of simple inguinal hernia, very marked in the first five years of life, especially for the right side, diminishes rapidly up to thirty years, then increases up to a second maximum at fifty-five years. Double inguinal hernia, rare in infancy, increase rapidly in frequency from thirty to forty-five years, less rapidly from forty-five to sixty-five, and then decrease. Congenital inguinal hernia is extremely common during the first five years of life; they then diminish very rapidly in frequency, or are only seen associated with other varieties between thirty-five and fifty-five years. This is a proof that nearly all cases of congenital hernia disappear spontaneously or under the influence of a truss. The radical cure of these herniæ is, therefore, apart from exceptional cases, unjustifiable during the first four years of life. Femoral herniæ, exceptional in the male children in whom it always is simple, hardly begin to show themselves towards the age of thirty; their maximum of frequency is between sixty and seventy years. Simple umbilical hernia in the male is very common in the first year; from the fifth year onwards it practically disappears. Associated with other varieties, however, it is seen in middle and especially in advanced life. Epigastric hernia, rare in the male child, is hardly seen until after the age of thirty. Multiple herniæ are rare in the male child, less rare in adolescents, but frequent in adults, and especially in old men. In the female the dominant form in early years is the umbilical, which is extremely common; it disappears almost entirely between ten and thirty years, but becomes again more common after the latter period. Inguinal hernia increases in frequency between the ages of five and thirty, and both it and the crural variety from the latter age up to seventy, when both decrease rapidly. The majority of inguinal herniæ (in the male) appear first between forty and fifty years of age (congenital herniæ are not counted). Left inguinal herniæ appear later than right. Congenital inguinal herniæ make their appearance mostly very early in life; this may, however, be deferred to the first or second childhood, or even to puberty, or again to a later period. In the female inguinal hernia appears somewhat earlier than in the male (from thirty to thirty-five years). Femoral hernia appears most frequently in woman between the ages of thirty-five and forty-five, in man between forty and forty-five, the maximum of frequency in woman corresponding, as for inguinal and a certain number of umbilical herniæ, to the period of sexual activity. Umbilical hernia is congenital, or appears during the first year in nearly all cases in males, and in the great majority in females. In woman, a large proportion appearing after thirty years, it is a question whether these subjects are not congenitally affected, and whether pregnancy has not been the aggravating cause. Professor Berger has discovered that the average age at which hernia first appears in individuals affected with multiple or double varieties (especially double inguinal) is much more advanced than is the case in the subjects of simple hernia. This would seem to prove that simple hernia is more often congenital in origin, whilst the double or multiple are acquired. The interval (very variable) between the appearance of two herniæ in the same subject is longer for congenital inguinal herniæ than for all other varieties of hernia. In acquired inguinal and in double femoral hernia the interval hardly exceeds ten years; in a good third of the cases the bilateral herniæ development is simultaneous. Hereditary influence was noted in 2079 out of 7542 cases. This hereditary predisposition is especially homosexual (from father to sons and from mothers to daughters). In families in which the hernial heredity was noted, 1 in 3, or even 1 in 2, members had hernia, thus demonstrating the existence of hernial families. The influence of occupation in the production of hernia is undoubted (manual labour and, also, work in the erect posture). Certain sedentary occupations requiring a forward inclination of the body and repeated efforts predispose particularly to hernia. Parturition favours hernia, as is shown by its enormous frequency in multiparæ. It is especially after labour, rather than during pregnancy, that hernia appears, although some already existing herniæ only then increase in volume. Diseases of the respiratory organs favour hernia; urinary affections and habitual constipation have hardly any influence. Amongst occasional causes unusual muscular effort whilst in a *false* position or whilst carrying a burden is prominent. Cicatricial hernia are, according to Professor Berger, rarely seen. Irreducible hernia is comparatively rare (1 in 28); it is commoner in femoral than in inguinal, in umbilical and epigastric than in femoral, and more frequent in woman than in man. It is less commonly seen in herniæ subjected to the pressure of a truss than in others. Functional troubles (colic, local pain) are observed in cases of voluminous and partially irreducible herniæ. Dyspeptic symptoms are very frequent in male subjects with epigastric and in female subjects with umbilical ruptures. Of 10,000 hernial subjects of all ages and both sexes 3·31 per cent. had suffered at one time or another from serious complications connected with the hernia. These complications were more frequent in the female (5·34 per cent.) than in the male (2·46 per cent.), in femoral hernia (6·45 per cent.) than in umbilical (1·91 per cent.) or inguinal (1·45 per cent.). Of these complications, strangulation (serious 250 cases, mild 43 cases) was the most common. The wearing of a truss appears to exercise no

influence one way or the other in inducing the appearance of complications which are liable to recur. They are more frequent in old than in recent herniæ; they are more serious in woman than in man, in femoral than in other varieties. In more than one-half of the cases of strangulated femoral hernia in the woman kelotomy had to be resorted to. Thus, while females are much less liable to hernia than males, complications are more frequent, and these complications are more serious in their nature. *This is an important point in life assurance reports.* Strangulated hernia, with or without operation, does not, however, appear to involve a high mortality (about 1 per cent.). There is, therefore, one condition without which the operation for the radical cure of hernia is unjustifiable—and that is its innocuousness. The foregoing *résumé* of a most valuable paper is, unfortunately, rather diffuse. The vast importance of the subject is, I imagine, a sufficient excuse for this long-windedness, and the profession owes a debt of gratitude to Professor Berger for his painstaking researches.

Nov. 5th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

The Sixth Congress of Internal Medicine.

BY a not altogether desirable arrangement the forenoon sitting on Oct. 23rd was devoted, not to the discussion of the report on Sero-therapy—an account of which was published in the last issue of THE LANCET,—but to the reading of the paper by Professors De Renzi and Reale on the Decline of Nutrition in the Human Economy. Professor De Renzi, who holds the chair of Clinical Medicine in the Neapolitan school, took up the first part of the subject, and after an elaborate and interesting exposition he came to the conclusion that there is a group of maladies presenting characters in common—characters hitherto attributed to a decline, slackening, or falling off (*rallentamento*) in metabolism. But the genesis of these maladies—at least, in some cases—cannot unreservedly be ascribed to this *rallentamento*. With more probability must we seek their cause in the diminution of the oxidising processes and the position as regards aeration (*posizione acrobia*) of the tissues. By such perturbation in nutrition are developed acid products and substances peculiarly toxic, above all in the nervous system. A character common to nervous disturbances in these affections is their manifesting themselves mainly in the night, when, by the patient's reposing in bed, there is a considerable diminution in the consumption of oxygen and in the elimination of carbonic acid. The principal remedy in such cases consists in the diminution of food and in exercise, while benefit may be derived from a special alimentation and from diverse modes of treatment, chemical and physical. But it is not improbable that with the discovery of oxidised *media* or ferments extracted from the tissues we may attain a rapid and complete cure of these maladies. The remainder of the subject was dealt with by Professor Reale, assistant to Professor de Renzi. His positions were these: The received doctrine of nutrition is based on two orders of facts, first, those which have regard to the organic equilibrium, and secondly, those which concern the bio-chemical processes carried on in the *vie intime* of the tissues. Research into the organic equilibrium of the healthy subject is far advanced as compared with that into the unhealthy or diseased, which latter, indeed, can hardly be called "initiated." The former must be our main guide in studying the alterations in the material exchange (metabolism). Experimental investigation into the *vie intime* of the animal tissues establishes the existence of a *funzione anacrobia* which is not in opposition to the data of the pathology of metabolism. Decline of nutrition is not manifested under one form only. Diminished energy of exchange in the cellular elements, strictly so called, is found only in polysarcia adiposa. It is wanting in all the other affections commonly held as kindred, diabetes included. In these latter we are confronted, as a characteristic note, with the fact that a part of the material of decomposition abandons the tissues incompletely oxidised. The appearance and the augmented elimination of some principles really indicate an alteration in the intimate nutritive exchanges of the tissues, and peculiarly in the deficiency of organic oxidation. Recent studies diminish the value hitherto attached to uric acid, withholding confirmation from its claim to be a product of the decomposition of albumin; but not so for oxalic acid, to which the same studies revindicate the importance originally assigned to it. To determine the degree of intensity of the oxidative products (*prodotti ossidativi*) in the organism we have at length a sound method—by comparative researches on individuals themselves in determining the relation between the neutral sulphur (*solfo neutro*) and the acid sulphur (*solfo acido*) of the urine. This closed the forenoon sitting. After luncheon began the discussion on the previous day's report on Sero-therapy. Professors Guiffré, Petrone, Fazio, and Senise made diverse criticisms, agreeing, however, that those who had watched closely the patients treated with the Maragliano serum found the results surprisingly favourable. After this the discussion took a theoretical turn and brought Professor Foà to his feet in reply. Admitting that sero-therapy was still on its trial, and that in tuberculosis particularly the laboratory has much to prove, while the clinique is by no means entirely convincing, he maintained that the therapeutic art, with its new agent, was on the right track and the desired goal not far distant. Professor Maragliano next availed himself of his right to reply, and said that as a clinician he reduced his claim to the narrow compass of being able to prove that his serum is a true adjuvant to the treatment of tuberculosis—always subordinating the seductive findings of the laboratory to the test of tests—that of the bedside. By permission of the President the Neapolitan Professor von Schrön was allowed to speak in supplement to Professor Maragliano. The tenour of his remarks was on the whole favourable to the serum in tuberculosis. Too early in the day for a definite judgment, we may yet claim, he thought, for the Maragliano agent an increase in the number of cures of tuberculosis in the primary stage. The forenoon sitting of the 24th was occupied with miscellaneous subjects, the first of which, as handled by Dr. Queirolo and Dr. Cavazzini of Pisa, on the Ictus Cordis, was especially interesting. Cognate to this, and equally well discussed, was the paper of Dr. Bonetti of Padua on the Morphology of the Heart, while Dr. Gay of Pinerolo read a useful monograph on Infantile Paralysis. The afternoon witnessed some "slaughter of the innocents" in the suppression or perfunctory hearing of other papers, some of which yielded in interest and expository power to none of the preceding ones. The sittings of the 25th were similar in their tenour, the papers most likely to form the chief attraction of the official "Atti" (proceedings) being Professor Lucatello's on Puncture of the Liver with a Diagnostic Aim, Dr. Pittarelli's Studi Urologici, and Dr. Mennella's on the Treatment of Anæmia and on Velocipedism. Dr. Baccelli (President), *à propos* of a paper by Professor Reale on Nitrate of Silver in the Therapeutics of the Stomach, described some cases of follicular disease of the pylorus in which he had found the nitrate wholly successful. The Congress was thereafter closed by an eloquent discourse from Professor Rummo, who, in the absence of Dr. Baccelli, was called to the presidential chair; and preparations for its successor, the seventh, were made by the appointment of an organising committee, of which Dr. Baccelli was re-elected president, Professors Murri and De Renzi vice-presidents, Professor Maragliano secretary, and Dr. Rossoni treasurer.

A Warning to Tourists.

Italian vineyards have of late years been heavily visited by the peronospora, and to counteract it sulphate of copper has been freely powdered over the stems, the shoots, the leaves, and even the grapes themselves. In consequence the tree and its product have become so charged with copper as to be a fertile source of poisoning. So frequently has this been the case that in some communes the sanitary authority prohibits the use of vine-leaves as wrappages for butter, while, as to the grapes themselves, so favourite an adjunct to dessert, they have proved in many instances positively dangerous to the consumer. Gastro-intestinal irritation in every degree up to active poisoning is quite a common sequela to their consumption, so much so indeed as to add a new terror to the sojourner in *pension* and hotel. In the better class of these houses the grapes are well washed before being put upon the table, and even then they are none the worse for an extra dip or two in the finger-glass, or, failing that, in the tumbler. In Italy, indeed, where mediæval uncleanliness pervades even city life, it is always well to wash one's fruit in this way before tasting it at dinner—a glimpse of the hands through which it has previously passed

sufficing to justify the precaution. But in the matter of grapes the powdering of vine-leaf and fruit with cupric sulphate makes previous washing of them doubly necessary on the consumer's part, if he would minimise the risk of severe colic or worse. Nor is it from the grape alone that the danger of copper poisoning is a real one in Italian hotels. The other day in the Neapolitan territory, on the opening of a new railway line, I read of a banquet in honour of the occasion, at which between thirty and forty of the company's employés sat down. Every one of them before regaining his home was the same evening attacked with the severest abdominal pains all too traceable, it is said, to poisoning due to verdigris adhering to the culinary pots and pans. From the same cause, as opportunely reported in THE LANCET not so many months ago, some forty patients in the great hospital of the Santa Maria Nuova in Florence were seized with excruciating tenesmus, and, as there was a "cholera shadow" on the wing, the alarm so occasioned extended beyond the specially visited ward and threw the whole establishment and neighbourhood into not unjustifiable panic. Medical inquiry soon set the matter at rest, however, having ascertained that the culinary apparatus in use at the hospital was foul with verdigris, the irritant properties of which had been liberated in unusual proportion by some accidental ingredient employed in cooking. Italian winter cities are apt to grumble if for a season the travelling world gives them a wide berth. Does it never occur to them that they themselves are often more prolific of deterrents than of attractions, and that a more hospitable view of the "foreign import" than as a source of revenue should prescribe on their part a little more attention to sanitary and culinary law? They may look on the stranger within their gates as a "goose"—but then he is a goose that lays "golden eggs"; and their wisest policy is to keep him in good case, to do anything to him but "kill" him.

Nov. 1st.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

The Etiology of Gout.

HORBACZEWSKI's opinion that there is a constant proportion between the number of white corpuscles in the blood and the amount of uric acid excreted has been refuted by Dr. Kolisch, who stated at a meeting of the Vienna Medical Society that from the nuclein there originate albumin and nucleinic acid, the latter again forming phosphoric acid and an unknown substance which transforms itself into uric acid and the so-called alloxur bases. As long as the kidneys are sound all the products of the decomposed nuclein are excreted as uric acid, but in renal disease the formation of uric acid is incomplete, and in its place there occur alloxin bases. There is a certain connexion between true gout and some forms of renal atrophy, but the nature of this relation is not yet cleared up. The analogy of these diseases of the kidneys with those occurring in lead poisoning, and the further fact that lead may play a part in the etiology of gout, support the theory of the toxic nature of gout. Dr. Kolisch has succeeded in proving experimentally that there is an increase of alloxur bases in the urine of gouty patients, and he therefore supposes these substances to be the cause of gout. During normal action of the kidneys the greater part of the alloxur bases is excreted as uric acid; but when the structures which form uric acid are enfeebled there is an increased excretion of alloxur bases, with concomitant toxic effects. The most probable explanation of the uric acid diathesis is the existence of a congenital inherited tendency to an abnormal decomposition of nuclein. The substances thus originating do not impair the kidneys rapidly, for at first their toxic effect is counteracted, but in the course of years the kidneys become disordered, lose their power of counteracting the toxic effects of the nuclein products, and the health of the individual gives way. A fit of gout is, therefore, due to an overcharging of the organism with the products of the decomposed nucleins. Gout cannot be treated specifically, for there is no remedy which can diminish the inherited tendency to the decomposition of nuclein; but the patient must avoid all that is likely to increase the quantity of these products or to injure the kidneys. The beneficial effect of the alkaline treatment is probably due to the fact that by it the energy of the kidneys is increased. There is no ground for reducing the amount of albuminous food with the exception of tissues containing nuclein. Boiled meat is to be allowed, and also milk, eggs, and fat. Gout may be easily diagnosed, especially in children, by the so-called perinuclear basophilia on microscopical examination of the blood or by the occurrence of alloxur bases.

Pigmentation of the Skin after the Use of Arsenic.

At the last meeting of the Vienna Medical Society Dr Schlesinger exhibited a patient who had been taking Fowler's solution on account of a tumour in the right arm-pit, and after three weeks' use of it he noticed a discolouration of the skin. Pigmentation of the skin due to the use of arsenic was first observed some thirty years ago in a case of psoriasis. As a rule it commences gradually, and there is no pigmentation of the mucous membranes—a circumstance which distinguishes these cases from Addison's disease and argyria. The total quantity of arsenious acid taken by the patient amounted to 0·464 gramme (about 7 grains). Mathieu has published a case in which a patient took arsenic for ten years without sustaining any harm, but discolouration of the skin occurred when the daily dose was increased. Dr. Schlesinger advocated the use of arsenic in cases of lymphosarcoma, for the patient showed no other ill-effects attributable to the arsenic, and there was perceptible retrogression of the tumour.

Riotous Behaviour in the University.

Some days ago the University was the scene of disorders which have not failed to cause a general sensation. According to an old custom all the students' societies were present at the inauguration of the Rector Magnificus, which is celebrated with great pomp. But there is an old feud between those students who fight duels and those who refuse to do so, the latter, as true Catholics, condemning the practice from the religious point of view. Nevertheless, they appeared in the *aula* of the University with sabres, a proceeding which caused a great commotion, for the so-called "fighting" students tried to compel them to leave, and a scuffle ensued; but quiet was restored by the intervention of the Pro-Rector, who exhorted the students to respect the dignity of their *alma mater*. Charges against eighteen students have been laid before the Senate of the University, and the Rector has prohibited the so-called "Bummel," a promenade in the *aula*, which takes place every Saturday.

The Dermatological Congress at Gratz.

Tertiary syphilis was one of the subjects discussed at this gathering. Dr. Caspary (Königsberg) said that statistics have not proved that it is prevented by the intermittent treatment proposed by Fournier. He recommends the so-called symptomatic treatment in slight cases of secondary syphilis, and makes use of Fournier's method in grave secondary and tertiary forms. Dr. Meisser (Breslau) said that the omission of energetic mercurial treatment during the early stage of syphilis seems to be the most important factor in the etiology of tertiary symptoms. Mercurial treatment should be commenced as soon as syphilis is satisfactorily diagnosed, and in this case it sometimes happens that no relapse occurs during ten years. A proof of the etiological relations between neglected or insufficient mercurial treatment during the early stage of the disease and the eventual occurrence of tertiary manifestations is the prevalence of endemic syphilis in localities where it is not methodically treated.

Professor Vogl.

The Pharmaceutical Society of Great Britain has presented the Hanbury Medal to Dr. August Vogl, the Professor of Pharmacology. This is the eighth award of this medal, which was presented in 1881 to Flückiger, in 1883 to John Elliot Howard, in 1885 to Dragendorff, in 1887 to Dymok, in 1889 to Plaichon, in 1891 to Hesse, and in 1893 to Maish.

Medical Fees.

The country practitioners of Lower Austria are at present discussing the question of medical fees. Dr. Läufer has proposed the following tariff: advice at the house of the physician, 8*d*.; first visit to a patient's house, 1*s*. 3*d*.; all subsequent visits, 1*s*.; night visits, 2*s*. 6*d*.; a subcutaneous injection, 10*d*.; an injection with antitoxin, 3*s*. 4*d*.; putting up fractures, 9*s*. 10*d*.; herniotomy or tracheotomy, £1 5*s*.; amputation, £1 15*s*.; induction of premature labour, 16*s*.; and microscopical examination for bacteria, 3*s*. 4*d*. If the patient sends for another practitioner the one already in

attendance is to be informed of the fact, and when a patient desires to change his medical adviser the practitioner called in is not to undertake the case unless his predecessor has been paid.

Cholera in Galicia.

During last week 57 cases of cholera, with 32 deaths, have been reported from the districts of Tarnopol, Czortkow, Husiatyn, Kamionka, and Przemysl, making a total of 196 cases with 123 deaths since the commencement of the outbreak. In the preceding week there were 19 cases and 18 deaths.

Nov. 3rd.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Cholera News.

DURING the last twenty-four hours 7 new cases and 2 deaths have been reported from the infected districts. Since cholera was first officially declared on Oct. 13th there have now been 266 cases discovered, including 148 deaths. Allowing for the probable existence of a few mild cases which have not been reported, these numbers give a mortality of about 50 per cent. The districts may be geographically divided into four: Damietta and its suburbs have furnished 59 cases and 36 deaths, the medical officer of the district being Dr. Pinching; in Menzala and its neighbourhood there have been 167 cases and 94 deaths, and on the canal between Mansoura and Menzala 19 cases and 11 deaths, all being under the inspection of Dr. Graham, who has been lent for this work by the Egyptian Army; Fakus, a small town in another province, has furnished 21 cases and 7 deaths, and the whole of this neighbourhood is under Mr. H. Milton. Dr. Keatinge, moreover, has been despatched to Mansoura to carry out sanitary reforms begun there last week by Dr. Sandwith. Each of these medical men has a competent police officer attached to him and as many native medical men as he wants. It seems to be admitted without argument by all nationalities that it is only Englishmen to whom the energetic work of stamping out disease can be entrusted. It is satisfactory to see that cholera has as yet not spread beyond the places where it was originally discovered after active search. The abominations of land quarantine and sanitary cordons are not being used, but a constant series of inspections of all barges and their passengers has been instituted on the Nile and canals between Cairo and the infected spots. Dr. Rogers Pasha returned to Cairo from England a week ago and has organised a system which ought to be sufficient to eradicate the existing bacilli. His greatest ally is the Nile in flood, the current of which flows in the direction exactly opposite to that of the cholera march.

Precautions at Mansoura.

English readers may like to know some of the principal points which are likely to occupy a sanitary reformer in an Egyptian town threatened with cholera. Mansoura has a population occasionally reckoned at 40,000, and sometimes at 60,000, but with no proper sanitary inspection. There is an attempt at a town council, but it consists entirely of natives and is quite useless. The drinking-water all comes from the Nile, and instead of being taken from stagnant pools near fouled banks must be drawn from the current itself a few yards out. Rafts for this purpose were made in two days, and every drinking place and the whole bank were placed under constant inspection. This was a very popular measure in the eyes of even the natives. The streets, the markets, and stables were all ill kept, and the organisation for scavenging existed only on paper. It is chiefly for this kind of work that young English police officers are admirable. A sanitary commission already exists for the town consisting entirely of unintelligent natives, so an attempt was made to leaven it by inducing the Mudir to add to it two European merchants. Most mosques have a public latrine attached to them, and all these have to be carefully inspected and the cesspools emptied out. Arrangements had to be made for both the sick and the dead in the event of cholera occurring either among the natives or among Europeans. This matter becomes complicated when one remembers that every European's home is sacred to him and to his Consular authority. Woe betide the Anglo-Egyptian if he happens to "infringe the domicile" of a French Syrian. A supply of disinfectants had to be summoned from Cairo to replenish the hospital stores, and all the quicklime of the town was bought up by the Mudir. Medicine for possible cases of diarrhœa was distributed gratis throughout the town, and huts for 36 patients were rapidly erected to make the nucleus of an infectious hospital to the south of the general hospital. The public baths, the prison, and the schools all had to be examined and reported upon, and certain salutary changes effected. It is impossible in a short space to describe the manifold duties of the moment, and it is quite possible that even better work is now going on in other towns and villages. The natives work extremely well under Englishmen, though they do absolutely nothing if left alone. They say themselves that they are contented with merely giving orders, whereas the Englishman goes the next day to see if his orders have been carried out.

Cairo, Oct. 30th.

Obituary.

RICHARD BASIL MORLEY, L.R.C.P., L.R.C.S. EDIN.

THE news of the sudden death of Mr. Morley at the early age of forty-three when in apparently perfect health came as a painful shock to his many friends in Leeds. He was the son of the late George Morley, for many years one of the leading practitioners in Leeds and lecturer on forensic medicine at the Leeds School of Medicine. Mr. Basil Morley began his medical career comparatively late in life. Of genuinely scientific and speculative tastes, he had found business uncongenial, and he entered as a student of the Leeds School of Medicine, where he was greatly distinguished amongst the men of his year in winning honours and prizes. He qualified in 1883 and became resident officer at the Leeds Public Dispensary. He then began practice at Chapel Allerton, Leeds, where for nine years he had a name for thoroughness of work and kindliness to the poor. Mr. Morley was always a lover of nature, and delighted especially in country work. He was a man of such an unusually quiet and retiring disposition that comparatively few of his professional brethren knew the breadth of his mental endowments or the force and depth of his personal character. To his friends and patients he was greatly endeared by his kindly and genial disposition and his gentle and generous heart. The cause of his death was cardiac syncope. He had ridden out three miles into the country upon a bicycle to visit a poor patient, and, sitting by her bedside, he fell forwards suddenly from his chair and almost immediately expired. The very large number of mourners who filled the churchyard at his funeral testified to the public esteem which he had won in his short professional life.

JAMES MATHEWS, L.R.C.P., L.R.C.S. EDIN., L.A.H. DUBL.

PUBLIC feeling in Cavan has been deeply moved by the death of Mr. James Mathews, who passed away on Oct. 20th after a short illness. The deceased gentleman's blameless life, gracious manner, and devotion to the interests of his patients, united in procuring for him an enviable position in popular esteem. He came of a talented family, many members of which as priests have devoted themselves to the spiritual welfare of their fellow creatures, and his natural abilities found congenial exercise in the acquisition of professional knowledge during the long period which has elapsed since he entered into practice in 1860. On Oct. 22nd a solemn mass for the dead was said in Cavan Cathedral and the interment took place in the burial ground at Laragh in presence of a very large assemblage. Mr. Mathews leaves a sorrowing widow and family.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Otto Janicke, chief medical officer of the Augusta Hospital, Breslau, after a short illness. He was a comparatively young man and was greatly esteemed for his skill in operative surgery.—Dr. Hermann Fischer of Berlin, formerly Professor Langenbeck's assistant. He, however, gave up surgery and practised as a homœopath.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE annual meeting of Fellows and Members of the Royal College of Surgeons of England was held on Thursday afternoon in the Hall in Lincoln's-inn-fields, London. Mr. CHRISTOPHER HEATH presided.

The Council's Report.

The PRESIDENT formally presented the annual report from the Council, extracts from which have already been published. In doing so he gave a welcome to those attending the meeting, and ventured to remind them that they, the Fellows and Members, were the corporation of the College. That he found was a fact that was very often overlooked.

Surgeon-Major INCE moved: "That the Fellows and Members here assembled in annual meeting desire to thank the Council for the interesting and important report now presented, and particularly to express their approval of the new By-laws, Sections 4 and 16, and of the Regulations of the Council, Section 25, relating to the meetings of the Fellows and Members of the College." He desired, he said, to express sympathy with their esteemed secretary.

The PRESIDENT asked Surgeon-Major Ince to confine himself to the business and be as brief as possible.

Surgeon-Major INCE said he apologised. This, he went on to say, was the third time he had moved a motion of the kind. He trusted it would be the last, because he thought the motion should come from a Fellow rather than a Member. The motion was very necessary and it was desirable. By accepting such a motion the Council conceded to them the privilege of criticising their administration of the affairs of the College, and if these annual meetings were continued, they should in the course of time acquire a prescriptive right to have annual meetings. That was an important reason why a motion of this kind should be brought before the meeting. Surgeon-Major Ince was proceeding to raise an educational question when the PRESIDENT again interrupted him, asking him to confine himself to the motion.

Surgeon-Major INCE thereupon formally moved the resolution.

Mr. GANT seconded.

Mr. GEORGE BROWN did not know how they should accept such a motion. They did not know what the by-laws referred to in it were, and he was quite sure the Council did not require a formal expression of the Members' and Fellows' approbation. They should drop this and go on with the more important business on the paper. He moved the previous question.

Mr. BRINDLEY JAMES seconded this amendment.

The PRESIDENT at once put the proposal to the meeting, and the previous question was carried by a majority.

Reform in the College.

Mr. JOSEPH SMITH rose to move: "That this meeting requests the Council to take steps to obtain an amended Charter which shall contain the following provisions: (*a*) that no alteration in the constitution and external relations of the College shall be effected without the consent of the body corporate convened to discuss such alterations; (*b*) that the present annual general meeting be made statutory, and that the report of the Council shall be submitted for formal adoption; (*c*) that the number of the Council be increased to thirty-two, and that eight of these, who may be Members, shall be elected by the Members only, provided always that no Member who has not been a Member for twenty years shall be eligible for a seat on the Council." He said it was continually being asked: Who were the men who were agitating for reform? Where did they come from? What was their standing? Members of the Council were continually harping on this string, suggesting that those who asked for reform were nonentities. But what he had to tell those members of Council in reply was that for the last ten years resolutions asking for reform had been carried in that building by crowded meetings from all parts of England. It did not matter what was the membership of their association, whether it numbered 5, 50, or 5000. They spoke in the name of those men who had met for years and years, and in the name of 5000 men whose signatures were attached to a petition which at present lay at the Home Office, asking what they were demanding here. Yet they were held to be an insignificant body.

The PRESIDENT suggested that the proposal should be taken in sections.

Mr. SMITH said he wished the proposal to go forward as a single resolution, but he was in the hands of the chair.

The PRESIDENT thought it advisable to proceed in sections.

Mr. SMITH formally moved (*a*) as a section.

This was seconded by Mr. DICKINSON, and unanimously carried.

Mr. SMITH, in next moving Section (*b*), said they held this and like meetings subject to their good behaviour. It was quite open for the Council to shut the door in their faces, telling the Members and Fellows that they did not want them.

Mr. DICKINSON seconded, and this section also was unanimously adopted.

Mr. SMITH said that Section (*c*) was the *crux* of the resolution. He believed the membership of the College was 14,000 or 15,000, and all they asked for was a representation of eight, who might be Members or might be Fellows. At present the Members had absolutely no control over the affairs of the College. It all lay in the hands of the Fellows, who numbered only about eleven hundred. Those who asked for reform did not ask for any of the privileges of the Fellows, but they fully believed that if the Members were represented on the Council that body would be very much strengthened. Their chairman of to-day was not the President of the College of Surgeons.

The PRESIDENT: I beg pardon.

Mr. SMITH: No; you are only elected by the Fellows; you are the President of the Fellows. How much greater would be your power and influence if you were elected by Members in addition to Fellows.

Mr. DICKINSON seconded.

The motion was supported by Dr. ALDERSON, Mr. TIMOTHY HOLMES, and Mr. CRAVEN, and on being put to the vote was carried, there being only two dissentients.

Admission of Women.

The PRESIDENT stated that the Council desired to afford the Fellows and Members present the opportunity of expressing their views upon the question of the admission of women to the examination for the diploma of Member. The matter came before them in this way. The Council had received a letter from Mrs. Garrett Anderson asking that the students of the London School of Medicine for Women should be admitted to the examination of the College. The question was a very important and vital one, and, while having no proposal to make, the Council wished to have the benefit of the meeting's views on the subject.

Mr. GEORGE BROWN said everyone had sympathy with ladies who were studying for their noble profession, but he could not conceive any good reason for admitting them to Membership of the Royal College of Surgeons. They could get diplomas elsewhere, as all the universities of the United Kingdom were open to them.

Mr. JOSEPH SMITH, agreeing with Mr. Brown, moved: "So many portals are open to women to obtain a surgical diploma, it is not expedient that this College should open its doors to admit women to examination for the diploma of the College."

Mr. BRINDLEY JAMES seconded this motion. He did not wish the College to be under petticoat government. He was afraid that if women were admitted Members of the College they would also be admitted to the higher positions, to the Fellowship and to the membership of the Council. As a matter of fact, he for one objected altogether to women getting into the medical profession, and if they were to obtain diplomas at all he would prefer that they should get them from the Royal College of Physicians.

Mr. CLEMENT LUCAS moved as an amendment that in the opinion of this meeting women should be admitted to the diploma of this College, but he did not think the Members and Fellows of the Royal College of Surgeons should be frightened at the competition of women, and he hoped that no petty feelings would prevent this meeting from doing the women justice.

Mr. NORTON seconded the motion. He saw no reason why women should be excluded.

Dr. R. BARNES, in supporting the original motion, pointed out that surgery was the highest grade of the profession. It demanded the highest talent, skill, and powers, and these did not belong to women.

Dr. ALDERSON did not think it would give strength to the

College to admit women to the best surgical diploma in the world.

The amendment was then put to the meeting and rejected by 53 votes to 42. On the original proposal being next put as a substantive resolution, 58 voted for it and 39 against it.

A vote of thanks to the President brought the proceedings to a close.

Medical News.

FOREIGN UNIVERSITY INTELLIGENCE.—*Breslau:* Dr. Weintrand, late of Berlin, who was recently appointed to the post of Chief Medical Officer of the Policlinic, has been recognised by the University as *privat-docent*.—*Budapest:* Dr. Herczel has been recognised as *privat-docent* in Surgery.—*Bonn:* Dr. A. Partheil, first assistant in the Marburg Pharmaceutical Institute, has been appointed Extraordinary Professor of Pharmacy.—*Göttingen:* The chair of Surgery, vacated by Professor König's translation to Berlin, is expected to be offered to Dr. Riedel of Jena.—*Marburg:* Dr. Ostmann of Königsberg has been appointed Extraordinary Professor of Otology in succession to Professor Barth, who goes to Breslau.—*Tübingen:* Dr. Lenhossek of Würzburg has been appointed Prosector in the Anatomical Institute in succession to Dr. Froriep, who has been promoted to the Professorship of Anatomy.—*Würzburg:* Dr. Johannes Sobotta, assistant in the Berlin Anatomical Institute, has been appointed Prosector in place of Dr. Lenhossek.

DIPHTHERIA AT LEATHERHEAD.—The Leatherhead urban district council is unable to account for an epidemic of diphtheria. Mr. E. L. Jacobs, the medical officer of health, has reported to a recent meeting of the body in question that he is unable to arrive at any definite conclusion as to its cause. At one of the infant schools a few cases of sore-throat have been noted, and it is suggested that a slight unrecognised diphtheritic attack in some of these cases may have been the cause. Dr. Thorne Thorne, writing to Mr. Jacobs, expressed an opinion that the impurity of the water-supply had never caused the disease, there being, indeed, he said, abundance of evidence in the opposite direction. At the same meeting of the council more cases of scarlet fever were reported and some water-supplies stated to be unfit for domestic use. No action was, however, taken in regard to the latter.

DIPHTHERIA IN LONDON.—The condition of the metropolis as regards diphtheria is even worse than we reported last week. In the last week of October the registered death-rate fell to 61 from the 76 of the previous week, and though the 76 deaths were a rise in one week from 56, it was hoped that the high total was exceptional. These hopes were, however, dissipated by the death-roll of last week, when the registered deaths from diphtheria in London again rose to over 70—being 72—and were 34 in excess of the corrected decennial average of the forty-fourth week of the years 1885–94. Whilst the heaviest number of deaths belonging to any one sanitary area occurred in Greenwich, there was also a large amount of the disease in the north of the metropolis, especially in Islington, and even further afield. The number of removals continues to be ridiculously small in comparison with the new cases coming to light, the removals of last week being slightly over 100, and in the previous week only 115 out of some 320 fresh cases. On Saturday last the patients remaining under treatment in the London hospitals numbered 671, practically the same as in recent weeks. It is evident that as vacant beds are reported they are filled up at once, but this by no means suffices for the amount of disease newly arising. In greater London the deaths were last week again over 20 in number, occurring most numerously in West Ham, in Hornsey, and in Willesden. In all these districts, especially the former, the disease seems to be established; and in Essex we hear of it as far away as Larkfield, near Maidstone, where schools have had to be closed, and several deaths are reported. During last quarter there were 1805 deaths from diphtheria in England and Wales, and of these 605 occurred in London—that is, one-third of the total number of deaths in but one-seventh of the population. In the county of Essex the death-rate from diphtheria was 64 per 10,000 of population, as against 24 in the country at large; and in the town of West Ham it was as high as 85. In Willesden, Hornsey, and also in several home counties, in addition to Essex, the fatality was exceptionally high, though there were counties with absolutely no deaths from the disease during the entire quarter.

SUPERANNUATION ALLOWANCE.—Mr. Thomas G. Anthony, M.R.C.S., late medical officer and public vaccinator, the Tredegar district and workhouse, Bedwellty union, has been granted a superannuation allowance of £80 per annum.

A SAD CATASTROPHE.—A fatal accident occurred on Friday last at Chepstow to Mr. Arthur Snead Lawrence, late a student of Middlesex Hospital, the eldest son of Mr. A. G. Lawrence, M.D., J.P., of Chepstow. The deceased gentleman, who had very recently obtained his double qualification at the Conjoint Board, was thrown from his horse and sustained a fracture of the skull, to which injury, after thirty hours' unconsciousness, he succumbed on Saturday evening.

SUSSEX COUNTY HOSPITAL.—An influential public meeting was held in the Royal Pavilion, Brighton, on Oct. 31st, for the purpose of calling attention to the financial position of the Sussex County Hospital, and devising means for increasing its income. The Earl of Ashburnham, who presided, said that the hospital had claims on the generosity of the public far beyond the limits of Brighton, the town being a favourite resort of visitors from all parts of the country. The hospital was very embarrassed in a financial sense, a balance of £295 being due to the treasurers on Dec. 31st, 1894, and a large legacy recently bequeathed having become the subject of a law suit. Repairs of the present building and very considerable structural improvements were absolutely necessary, some of these being sanitary towers estimated to cost about £2900; additional accommodation for the nurses, about £4850; a new out-patients' department, about £4800; a hydraulic lift about £600; and a new operating room about £1200. The total estimated cost of these indispensable buildings was £25,000, and a resolution was passed to the effect that every effort would be made to raise that amount.

NEWTON ABBOT WORKHOUSE.—On Wednesday last Dr. James Culross, medical officer of Newton Abbot District and Workhouse, presented a quarterly report to the Newton Abbot Board of Guardians, in which he advisedly deviates from the usual course in such reports, and takes a survey of the condition of the workhouse and of the progress that has been made during the past twelve months in the institution. After referring to the improvements that have taken place on all sides—improvements which it must be a source of gratification to the guardians to observe have been productive of much good—Dr. Culross calls attention to the grave structural defects which exist. One of these—the absence of an infirmary—will in all probability be soon remedied, as the plans for such a building have been completed and are only awaiting the sanction of the Local Government Board. But unfortunately the receiving wards are totally unfitted for their purpose, and it is quite obvious that so long as the provision for dealing with cases on their very entry is inadequate all the care that may be taken in other departments of the building will be rendered futile. With regard to administrative questions it is quite apparent that the nursing staff, if it is to be properly effective, must be thoroughly reorganised. Appended to the report is a gratifying testimonial to the staff of the institution, to whose loyal and persevering efforts the Medical Officer attributes much of the progress that has been made during the year.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ADAMS, JOSEPH, M.B., C.M. Edin., has been reappointed Medical Officer of Health to the Runcorn Rural District Council.

ADDENBROOKE, E. H., M.R.C.S., has been reappointed Medical Officer of Health to the Kidderminster Rural Sanitary District.

BARR, JOHN, M.B., C.M. Glasg., has been reappointed Medical Officer of Health to the Rishton Town Council.

BEAUMONT, A. W., L.R.C.S., L.M. Edin., has been reappointed Medical Officer of Health to the East Ham District Council.

BROWNING, B., L.R.C.P. Lond., M.R.C.S., D.P.H. R.C.P. Edin., has been reappointed Medical Officer of Health by the Weymouth and Melcombe Regis Urban District Council.

BURNETT, W. E. S., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Tintwistle Rural Sanitary District.

CAMERON, R. D., L.R.C.P., L.R.C.S., L.M. Edin., has been appointed Medical Officer and Registrar of Births and Deaths for the Wallingfen Sanitary District of the Howden Union, Yorks.

CLENDINNEN, W. McK., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health by the Coseley Urban District Council.

COLLINS, E. TREACHER, F.R.C.S., has been appointed Assistant Surgeon to the Royal London Ophthalmic Hospital, Moorfields.

COOKE, T., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer of Health by the Limehurst Rural District Council.

FITCH, FREDK., M.D. St. And., M.R.C.S., has been reappointed Medical Officer of Health to the Kidderminster Rural Sanitary District.

FOSTER, WILLIAM, M.B., D.P.H. Camb., M.R.C.S., has been appointed Medical Officer of Health to the Snipley Urban Sanitary District.

GOODMAN, R. N., B.Sc. Lond., M.D. Camb., L.R.C.P. Lond., M.R.C.S., D.P.H., has been reappointed Medical Officer of Health for the Ham District of the Kingston Union.

GROOM, H., M.D. Camb., M.R.C.S., has been reappointed Medical Officer of Health to the Walsoken Urban District Council.

HALL, A., M.D. Edin., F.F.P.S. Glasg., F.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Mayfield Rural Sanitary District.

HASWELL, N. R., M.R.C.S., has been reappointed Medical Officer of Health to the Helston Rural District Council.

JONES, J. H., M.B., M.S. Edin., has been appointed Medical Officer of Health to the Newport County Council.

KEIFFENHEIM-TRUBRIDGE, L. W. A., M.D., B.S. Durh., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Hoo Rural Sanitary District, vice Packman.

LEWIS, C. E. M., M.A., M.B., B.C. Camb., has been appointed Assistant Resident Medical Officer to the North-West London Hospital.

LIGERTWOOD, C. E., M.B., B.Ch. Vict., has been appointed House Physician to the General Infirmary, Leeds.

LUKE, THOMAS D., M.B. Irel., has been appointed Medical Officer to the Parish of Dwinese, Sutherlandshire.

MACCULLOCH, T. A., L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer of Health for the Bishop Auckland Urban Sanitary District.

MCKENZIE, A., B.A. Cantab., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the General Infirmary, Leeds.

MCNIDDER, JAS., M.B., C.M. Edin., has been appointed Medical Officer of Health for the Urban Sanitary District of Hull.

MOLES, FREDERICK P., L.S.A. Lond., has been appointed Medical Officer of Health to the Urmston Urban District Council.

MORRIS, T. H. P., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to the Stourbridge Dispensary.

NICHOLSON, J., M.R.C.S., L.R.C.P., has been appointed Resident Medical Officer at Ida Hospital, the General Infirmary, Leeds.

OLIPHANT, FRANK, M.B. Edin., has been appointed Senior House Surgeon to the Chesterfield and North Derbyshire Hospital, Chesterfield.

PENNY, JOHN, M.B., D.Sc. Edin., has been appointed Resident Medical Officer to the Manchester Hospital for Consumption and Diseases of the Throat, Bowdon, vice N. F. Edwards, resigned.

RICHMOND, R., M.D., C.M. Edin., has been appointed Medical Officer of Health for the Dunmow Rural Sanitary District, vice B. Ronald, resigned.

STEWARD, E. S., M.R.C.S., L.R.C.P., has been appointed Resident Ophthalmic Officer to the General Infirmary, Leeds.

STOTT, W. A., has been reappointed Pathological Curator to the General Infirmary, Leeds.

TAIT, A., M.B. Lond., has been appointed Resident Obstetric Officer to the General Infirmary, Leeds.

TATE, S., M.D., B.Ch. Irel., has been appointed Medical Officer for the Richhill Dispensary District, Belfast.

TRETHOWAN, WM., M.B., C.M. Aberd., has been appointed Honorary Assistant Surgeon to the General Hospital, Perth, West Australia.

TROTTER, R. H., M.B., B.Ch. Vict., has been appointed House Surgeon to the General Infirmary, Leeds.

TUNSTALL, E. A., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Thornton Urban Sanitary District, vice T. G. Drake, resigned.

WILD, LEONARD, M.D. Durh., M.R.C.S., L.R.C.P. Lond., has been appointed Consulting Medical Officer to the East Sussex County Council.

WRAY, G. B., M.R.C.S., D.P.H., R.C.P.S. Lond., has been appointed Medical Officer of Health by the Barford Rural District Council.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BRADFORD INFIRMARY.—Dispensary Surgeon, unmarried. Salary £100 per annum, with board and residence.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W. — Clinical Assistant.

CLIFTON DISPENSARY, Dowry-square, Bristol.—Resident Medical Officer. Salary beginning at £150 a year, with an annual increase of £10 a year up to £200, with furnished rooms only.

DENBIGHSHIRE INFIRMARY, Denbigh.—House Surgeon. Salary £80 per annum, with board, washing, and residence in the house.

GENERAL INFIRMARY, Northampton.—House Surgeon. Salary £125 per annum, with furnished apartments, board, attendance, and washing.

HANTS COUNTY ASYLUM.—Third Assistant Medical Officer, unmarried. Salary £100 per annum (increasing to £125 after twelve months' service), with furnished apartments, board, washing, and attendance. Applications to the Committee of Visitors, Knowle, Fareham.

KILBURN, MAIDA-VALE, AND ST. JOHN'S-WOOD GENERAL DISPENSARY.—Vacancy on the Honorary Medical Board. Applications to the Secretary, 13, Kilburn-park-road, N.W.

ROYAL PORTSMOUTH HOSPITAL.—Assistant House Surgeon, for six months. Board and residence provided, and an honorarium of 15 guineas.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House Surgeon for six months. A gratuity of £10 will be given if found satisfactory.

ST. MARY'S HOSPITAL FOR SICK CHILDREN AND MEDICAL MISSION DISPENSARY, Plaistow, London, E.—Resident Medical Officer. Salary £80, with board, washing, and attendance. Applications to Chairman of Committee, Rev. T. Given-Wilson, Plaistow.

THE NEW HOSPITAL FOR WOMEN, 144, Euston-road, London.—Two qualified Medical Women as House Surgeons.

THE ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London, E.C.—House Physician for six months. Salary at the rate of £40 per annum, with board and lodging.

THE VICTORIA UNIVERSITY, Manchester.—External Examiners in Pharmacology and Therapeutics, and in Surgery.

TIVERTON INFIRMARY AND DISPENSARY.—House Surgeon and Dispenser, unmarried. Salary £105 per annum, with lodgings, attendance, fire, and lights.

WEST NORFOLK AND LYNN HOSPITAL, King's Lynn.—House Surgeon. Salary £80, rising £10 annually to £100, with board, residence, and washing.

WESTERN SKIN HOSPITAL, 179, Great Portland-street, London.—Vacancy on the Honorary Medical Staff.

Births, Marriages, and Deaths.

BIRTHS.

BURTON.—On Nov. 3rd, at the Barracks, Whittington-heath, Lichfield, the wife of Surgeon-Major F. H. M. Burton, M.D., Army Medical Staff, of a daughter.

CHEYNE.—On Oct. 31st, at 75, Harley-street, W., the wife of W. Watson Cheyne, F.R.S., of a daughter.

DEMPSTER.—On Nov. 3rd, at Viewley, Redhill, the wife of J. H. Dempster, L.R.C.P., M.R.C.S., of a son.

EVANS.—On Nov. 2nd, at Windsor-esplanade, Cardiff, the wife of Percy C. Evans, M.D., of a daughter.

EVANS.—On Oct. 28th, at Nottingham-place, W., the wife of Surgeon-Major Evans, I.M.S., of a daughter.

GAIRDNER.—On Nov. 2nd, at Westwood, Ipswich, the wife of M. W. Gairdner, M.B. Edin., Naples, of a son.

HAMILTON.—On Oct. 28th, at The Priory, Wymondham, Oakham, the wife of Henry Hamilton, M.R.C.S., L.R.C.P., L.S.A., of a son.

HICKLEY.—On Oct. 27th, at 302, South Lambeth-road, S.W., the wife of A. Mackenzie Hickley, L.R.C.P. Lond., M.R.C.S. Eng., of a daughter.

MARSHALL.—On Oct. 17th, at The Common, Upper Clapton, N.E., the wife of Arthur L. Marshall, M.B. Cantab., of a son.

MASON.—On Nov. 3rd, at Pear-tree House, South Ockendon, the wife of A. Haynes Mason, L.R.C.P. Edin., of a daughter.

PESKETT.—On Oct. 30th, at Oxford-street, Nottingham, the wife of A. W. Chalmers Peskett, M.A., M.B., B.C. Cantab., of a son.

TOWNSEND.—On Nov. 3rd, at Ivy House, Normanby, Middlesbrough, the wife of F. E. Townsend, M.D. Irel., of a son.

MARRIAGES.

DAUBER—POTTER.—On Nov. 6th, at Jesmond Parish Church, Newcastle-on-Tyne, by the Venerable the Archdeacon of Lindisfarne (assisted by the Rev. E. Sidney Savage, M.A., Vicar of Jesmond, and the Rev. R. P. Hudson, M.A., Vicar of St. John's, Bury), John Henry Dauber, M.A., M.B. Oxon., M.R.C.P. Lond., of 29, Charles-street, Mayfair, to Margaret Isabel, third daughter of the late Addison Potter, C.B., of Heaton-hall, Newcastle-on-Tyne.

LINNELL—WHITWORTH.—On Oct. 31st, at All Saints' Church, Turvey, by the Rev. G. F. W. Munby, Alfred Linnell, of Paulerspury, third son of the late James Edward Linnell, of The Hill, Paulerspury, to Mary Blanche Joanna, younger daughter of the late John Whitworth, of Turvey.

LIVINGSTONE—SCOTT.—On Oct. 30th, at St. Matthew's Church, Edinburgh, John Livingstone, M.B., C.M. Edin., Penrith, to Edith Ronald, only daughter of William Scott, Braid-road, Edinburgh.

SIMPSON—HERBERT.—On Nov. 5th, at St. Mary's Parish Church, Folkestone, James Christian Simpson, M.D. Edin., Tunbridge Wells, to Margaret Primrose, eldest daughter of the late Nicholas Herbert, South Kensington.

WAINEWRIGHT—BUSBY.—On Oct. 30th, at St. Cuthbert's Church, Kensington, Robert Spencer Wainewright, M.D. Lond., youngest surviving son of the late John Wainewright, of Belmont, Lee, Kent, to Emily Blanche, third daughter of the late Alexander Busby, of Cassilis, New South Wales.

DEATHS.

BALL.—On Nov. 6th, at his residence, Mille Crux, York, Alfred Ball, M.R.C.S., aged 69.

NEWBIGGING.—On Oct. 5th, at Willowmore, Cape Colony, of phthisis, Robert Pope Newbigging, B.A., L.R.C.S. and P. Edin., eldest son of the late Robert Newbigging, of Madras, aged 40 years. Indian papers please copy.

SHARKEY.—On Oct. 26th, at his residence at Ballinasloe, County Galway, Ireland, Edmund P. Sharkey, M.D. Dubl., in his 90th year.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Nov. 7th, 1895.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radiation in Vacuo	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Nov. 1	30·39	S.E.	45	45	67	54	44	0·13	Foggy
,, 2	30·28	E.	45	43	71	52	41	...	Hazy
,, 3	30·01	N.E.	45	43	56	51	40	...	Foggy
,, 4	29·76	S.W.	48	47	56	52	44	0·04	Foggy
,, 5	29·51	N.E.	47	47	60	59	44	0·25	Raining
,, 6	29·53	S.W.	56	52	86	61	47	0·12	Cloudy
,, 7	29·35	W.	53	52	69	57	52	0·14	Raining

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY.—MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Cases. Dr. Sansom: Addison's Disease treated by Supra-renal Extract.—Mr. Harold: Congenital Feeble-mindedness associated with Congenital Deficiency of the Chest-wall and with Cardiac Disease.—Mr. Wallis: (1) Wired Patella for Fracture in a Man aged seventy; (2) Compound Comminuted Fracture of the Skull, with Facial Paralysis.—Dr. L. Guthrie: (1) Spina Bifida Occulta with Paresis of Leg; (2) Postero-lateral Sclerosis.—Mr. S. Edwards: Case after Nephrectomy for Injury (with specimen).—Dr. Savill: Cases of Telangiectasis.—Mr. S. Boyd: Temporary Resection of Upper Jaw for Naso-pharyngeal Growth.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Dr. Frederic Hewitt and Mr. A. M. Sheild: On Posture in its Relation to Surgical Operations under Anæsthetics (adjourned discussion).—Dr. R. A. Gibbons: Renal Colic in Infants.

WEDNESDAY.—LARYNGOLOGICAL SOCIETY OF LONDON (20, Hanover-sq., W.).—5 P.M. Cases, Specimens, &c., by Dr. J. B. Ball, Dr. F. W. Bennett, Mr. A. A. Bowlby, Dr. A. Bronner, Mr. H. T. Butlin, Dr. Wm. Hill, Dr. A. A. Kanthack, Dr. Percy Kidd, Dr. Edward Law, Dr. Scanes Spicer, and Mr. W. R. H. Stewart.

HUNTERIAN SOCIETY.—8 P.M. Clinical Evening. Mr. W. Campbell McDonnell: Case of Congenital Ataxia.—Mr. Targett: Excision of Temporo-maxillary Joint in a Child.—Dr. Sequeira: Nystagmus.—Dr. Glover Lyon: Imperfectly developed Pinna.—Dr. Fred. J. Smith: Paroxysmal Hæmoglobinuria with Local Asphyxia.—Sir Hugh Beevor: Cases of Cervical Herpes, and of Retracted Lung in a Boy of four.—Dr. Ettles: Cases of Distension of Left Frontal Sinus, and of Horizontal Nystagmus.

SOUTH-WEST LONDON MEDICAL SOCIETY (Stanley's, 235, Lavender-hill).—8 P.M. Dr. Chas. W. Chapman: Heart Disease in the Young, its Management and Treatment.

THURSDAY.—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM (11, Chandos-st., Cavendish-sq., W.).—8 P.M. Card Specimens:—Mr. Wray: Case of Detachment of the Retina after Treatment.—Mr. Stephenson; Iridæremia in Two Brothers.—Dr. Bronner: Tumour of Lacrymal Gland.—Mr. Hartridge: Retinitis Circinata.—Mr. Tweedy: Multiple Foreign Bodies in an Eye retaining Normal Vision.—Mr. Work Dodd: Case of (?) Congenitally Small Field of Vision. 8.30 P.M. Papers:—Mr. W. H. Jessop: Some cases of Graves' Disease with Destruction of Eyes.—Mr. C. Wray: The Treatment of Detachment of the Retina.—Messrs. Eales and Sinclair: Uveal Cyst of the Iris.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens by Dr. Elder (Nottingham) and Mr. Skene Keith. Papers:—Dr. Elder (Nottingham): (1) The Present Condition of a Patient operated upon in April, 1894, for Double Ovarian Papillomata; (2) Notes on a Porro's Operation.—Mr. Skene Keith: Unusual Complications in two cases of Removal of the ovaries.—Dr. Halliday Croom: Glycosuria complicating an Ovarian Tumour and Ovariotomy.—Dr. John Shaw: Short Note on a Complication impeding the Convalescence of a case of Oophorectomy.

NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY (Great Northern Central Hospital, Holloway-road, N.).—8.30 P.M. Clinical Evening. Cases will be shown by Mr. Brooke, Mr. Hamilton, Mr. Mower White, Mr. T. P. B. Beale, Dr. E. C. Beale, and Dr. James Galloway.

FRIDAY.—EPIDEMIOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-sq.).—8 P.M. Mr. T. W. Thompson: Considerations in respect to "Return" Cases of Scarlatina.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, W.).—8.30 P.M. Adjourned Discussion on "Gastric Ulcer" to be opened by Mr. C. B. Keetley. Dr. Drewitt, Dr. Clippingdale, Mr. S. Edwards, Mr. Wharry, Mr. Bidwell, and Mr. Eccles will take part.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY.—LONDON POST-GRADUATE COURSE.—London Throat Hospital, Gt. Portland-st., W., 8 P.M., Dr. Whistler: Tuberculosis of the Larynx.

TUESDAY.—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 2 P.M., Dr. Craig: Impulsive, Homicidal, and Moral Insanity.

ROYAL COLLEGE OF PHYSICIANS, LONDON.—5 P.M. Dr. J. B. Bradbury: On Some New Vaso-dilators. (Bradshaw Lecture.)

WEDNESDAY.—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Gowers.

HOSPITAL FOR CONSUMPTION &C. (Brompton).—Dr. R. Maguire: Aortic Disease.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—5 P.M. Dr. Morgan Dockrell: Diseases of the Hair.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Dr. Turner: Neurological Cases.

THURSDAY.—LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Gt. Ormond-st., 3.30 P.M., Mr. John H. Morgan: Surgical Cases.—National Hospital for the Paralysed, Bloomsbury, 2 P.M., Dr. Taylor: Syphilitic Disease of the Nervous System.—Central London Sick Asylum, Cleveland-st., 5.30 P.M., Dr. W. Hale White: Cases in the Wards.

FRIDAY.—LONDON POST-GRADUATE COURSE.—King's College, 3 to 5 P.M. Prof. Crookshank: Typhoid Fever and Diphtheria.

SATURDAY.—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 11 A.M., Dr. Craig: General Paralysis of the Insane.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-sq., W.C.).—5 P.M. Dr. Morgan Dockrell: Parasitic Diseases (Vegetable).

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

JEAN JACQUES ROUSSEAU ON TIGHT-LACING.

To the Editors of THE LANCET.

SIRS,—There are probably few sumptuary topics about which more has been written than the feminine habit of seeking to improve upon nature by mechanical means, but I greatly fear that for all the good their admonitions have brought forth the well-meaning scribes might just as well have saved their labour. Fashion is a power against which it is vain to cope, and so long as that mysterious authority chooses to decree small waists, small waists we shall see though livers grow furrowed and kidneys break loose from their anchorages. At one of the numerous congresses that were held in Bordeaux the Hygiene of Clothing was the object of a discussion which was initiated by Dr. Solovief, but, inasmuch as all the discussers belonged to the ruder sex, it will readily be conceived that the proceedings savoured of monotony. It goes without saying that the manifold atrocities of the corset came up for universal reprobation, but although the denunciators of that unspeakable garment were full of eloquence it is no disparagement of their powers to say that not one of them was equal to Rousseau. Here is what the philosopher of Vevay wrote in "Sophie, ou la Femme" more than a hundred years ago.

"We know that the easy-fitting clothing of the ancients, which nowhere incommoded the body, contributed largely towards the preservation in both sexes of those exquisite proportions that we still may see in statues—proportions which nowadays have to serve as models for artists because disfigured nature has ceased to supply any. Of all those Gothic shackles, those multitudinous ligatures which impede our limbs in every direction, they did not have a single one. Their

women knew naught of those whalebone contrivances by means of which ours cripple the forms which they vainly imagine they are improving. I am quite incapable of imagining that this abuse, which in England they push to an inconceivable point, could possibly end otherwise than by causing degeneration of the species; and I even go so far as to maintain that the fascinating result aimed at is in bad taste. It is not an agreeable spectacle to see a woman cut in two like a wasp; it shocks the eye and wounds the imagination. Slenderness of the waist, like everything else, has its proportions, its proper measurements, and to depart from these is most certainly a defect. In the nude the eye could not fail to appreciate the incongruity of a too-slender waist; how, then, can it be reckoned a beauty beneath clothing? I do not dare to dwell upon the motives which induce women to insist on, as it were, encasing themselves in armour—a drooping bosom, an enlarging abdomen, &c. I admit that these things are not pleasing in a young person of twenty, but at thirty they are no longer shocking; and inasmuch as we are compelled, whether we like it or not, to remain at all times exactly as nature pleases—and seeing, moreover, that in these matters a man's eye is not to be hoodwinked—it is evident that these defects are less displeasing at any age than the silly affectation of posing for a young girl at forty. *Everything that impedes or constrains nature is in bad taste;* this is just as true of garments for the body as it is of ornaments for the mind. Life, health, reason, comfort, should weigh more than aught else; *grace cannot be present where ease is absent*, delicacy is not languor, and one need not be unwholesome to give pleasure. Pity is excited by suffering, but pleasure and desire seek for freshness and health."

I am, Sirs, yours faithfully,

Nov. 4th, 1895. A FAMILY MAN.

*** We have at different times spoken our minds concerning tight-lacing and the mis-shapen corset. But the well-fitting corset is a valuable article of attire. With different modifications it becomes, as all in our profession know, a useful surgical instrument; and the ordinary corset provides a grateful support in many conditions.—ED. L.

Mr. A. C. Elmore's letter was acknowledged in our issue of Oct. 19th, p. 1020. We must have full names and dates in support of his statements before we can consider the advisability of publishing his letter.

X.—We cannot answer general questions on such topics, as every separate case has a right and a wrong. If our correspondent will state the particular case we will advise him.

Mr. J. B. Pike.—We do not think the moment opportune to publish quite so contentious a letter.

Dr. A. Butler Harris is thanked for his communication.

TUBERCULOSIS AND SCROFULA.

To the Editors of THE LANCET.

SIRS,—In your report of Mr. Treves's address at Manchester he is made to say: "The tuberculous individual is the one whose tissues form a suitable soil for the development of the bacillus." A little earlier he defines tuberculosis "as an infective disease in which the tissue changes are due to ..... the tubercle bacillus." These statements I find much difficulty in reconciling, and cannot see how an individual can be "tuberculous" into whom no tubercle bacillus has entered, according to the latter of the two statements quoted. For this pre-tuberculous condition, which is quite defined, I think the term scrofula (or possibly struma as less abused) a reasonable one until more is known of this stage or condition. Many individuals may undoubtedly be termed scrofulous who just as certainly could not be termed tuberculous. As a lesion of this character the swelling of the upper lip and nose, so common in scrofulous children, may be mentioned. Doubtless not a few enlargements of the lymph glands are also of a similar character. The scrofulous condition is one of hereditary malnutrition and vulnerability to various injuries, of which the tubercle bacillus is no doubt the most important, though many others exist, as cold and overstrain. Tuberculosis is damage done to the tissues by the tubercle bacillus. Scrofula may be an unsatisfactory term, and has been wrongly applied to many tuberculous lesions; it, nevertheless, describes sufficiently a definite condition about which we know little, and yet one that ought not to be condemned as tuberculosis. The abuse of the term is not yet sufficient argument against its use.

I am, Sirs, yours truly,

Nov. 5th, 1895. RICHMOND LEIGH.

THE HEALTH OF EURASIANS.

To the Editors of THE LANCET.

SIRS,—I should be much obliged if any of your readers could tell me where I can find information regarding the health and physique of Eurasians and of their offspring. I am, Sirs, yours truly,

Nov. 5th, 1895. ETHNOLOGIST.

M.B.—The information will be found in THE LANCET of March 21st, 1891. But we believe that the patentee is dead, and we do not know where the article is obtainable.

M.D.—"The Woman who Wouldn't" (Simpkin, Marshall, Hamilton, Kent, and Co.); "Baby Buds" (Mrs. Wostenholme Elmy, Buxton House, Congleton), 1s.

Mr. John Bickerdyke is thanked for his communication.

MEDICAL ADVERTISING AT TENTERDEN.

A handbill has been sent to us, said to have been left in every shop in the town, announcing a Course of Lectures to Ladies by "Dr. Redman, Surgeon Lecturer *(sic)* and Hon. Life Member St. John Ambulance Association." All ladies interested are invited to attend. The charge is 2*s.* 6*d.*, and each lecture is to be illustrated by a practical demonstration. Our opinion is asked of this proceeding. We cannot approve of it and we trust that Dr. Redman will reconsider it in the light of professional objections to all sorts and methods of advertising the names of medical men.

MEDICAL MEN who may possess the current issue of the "Komical Kalendar," edited by Howard Paul, will have been astonished at the contents of the page allotted to the 301st day of this year, which are as below:—

301 **1895.** 64

OCTOBER

28

MONDAY

Doctor X. is not a crack shot, and is not remarkable as a physician; but despite this fact, when the shooting season comes round, he spends a fortnight in the fields with dog and gun.

"And that's the only period of the year when he doesn't kill anything," remarked Dr. Robson Roose, with a twinkle in his other eye.

Dr. Roose is doubtless ignorant of the way in which his name is being used. We trust that Mr. Howard Paul will in future years display better taste and not use the name of a living medical practitioner to give point to an offensive "chestnut."

A QUESTION OF ETHICS.

To the Editors of THE LANCET.

SIRS,—In view of the frequent remarks in THE LANCET and at the last meeting of the British Medical Association concerning medical advertising, I bring under your notice the enclosed cutting, which I took out of a recent copy of the *Irish Times*. From it you will notice that the honorary secretary of a general hospital gives his name, qualifications, and private address at the bottom of the advertisement of this hospital, a thing which to my mind is wholly unnecessary and can have but one object. The advertisement, as it is on the enclosed cutting, appears daily in the *Irish Times*. Trusting you will give the matter your attention and thanking you in anticipation,

I am, Sirs, yours truly,

Nov. 4th, 1895. A CONSTANT READER.

*** We think that it would be highly advisable that the honorary secretary in question should take steps to have his official correspondence directed to the hospital, making arrangements to have it forwarded thence to his private address, if it is more convenient to him to transact the hospital business at home. With regard to our correspondent's other queries: (*a*) Licentiates are not entitled to the style of "Dr."; (*b*) the assistant's work should certainly be done under the principal's active supervision, and the principal is the only person who would be officially recognised.—ED. L.

Parish Council.—B. has the claim of propinquity, but the Parish and the Local Government Board have the gift of the appointment.

R. W. S.—We do not recommend individual practitioners or give medical advice.

"WHAT IS LIFE?"

To the Editors of THE LANCET.

SIRS,—Without plunging into any metaphysical speculations, may I be allowed to ask whether the question propounded by scientists—"What is life?" is altogether a rational one? It would appear that investigations as to what conditions may produce, bring about, or manifest life are held as synonymous with life itself. For example, let us suppose chemists, by some synthetical process apart from any living matter, could so operate on inorganic matter as to produce or change this inorganic matter into living matter. It is clear we should have in such case no facilities by which we could recognise life as an entity other than we now possess. It is true we should manifest life for ourselves in lieu of life being manifested for us through nature; but we should have no comprehension of life *as an entity* beyond our present comprehension—hence, I submit, we should be no nearer in answering the question, "What is life?" than we now are.

I am, Sirs, yours truly,

Queen's-road, S.E., Oct. 29th, 1895. CLEMENT H. SEBS.

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